



***Federal Railroad Administration  
Office of Safety  
Headquarters Assigned  
Accident Investigation Report  
HQ-2008-58***

***Montana Rail Link (MRL)  
Huntley, MT  
June 25, 2008***

***Note that 49 U.S.C. §20903 provides that no part of an accident or incident report made by the Secretary of Transportation/Federal Railroad Administration under 49 U.S.C. §20902 may be used in a civil action for damages resulting from a matter mentioned in the report.***

1. Name of Railroad Operating Train #1 Montana Rail Link [MRL]		1a. Alphabetic Code MRL		1b. Railroad Accident/Incident No. 2008118			
2. Name of Railroad Operating Train #2 N/A		2a. Alphabetic Code N/A		2b. Railroad Accident/Incident No. N/A			
3. Name of Railroad Operating Train #3 N/A		3a. Alphabetic Code N/A		3b. Railroad Accident/Incident No. N/A			
4. Name of Railroad Responsible for Track Maintenance: Montana Rail Link [MRL]		4a. Alphabetic Code MRL		4b. Railroad Accident/Incident No. 2008118			
5. U.S. DOT_AAR Grade Crossing Identification Number		6. Date of Accident/Incident Month 06 Day 25 Year 2008		7. Time of Accident/Incident 07:20: <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM			
8. Type of Accident/Incident (single entry in code box)							
1. Derailment		4. Side collision		7. Hwy-rail crossing			
2. Head on collision		5. Raking collision		10. Explosion-detonation			
3. Rear end collision		6. Broken Train collision		11. Fire/violent rupture			
		9. Obstruction		12. Other impacts			
				13. Other (describe in narrative) Code 12			
9. Cars Carrying HAZMAT 0		10. HAZMAT Cars Damaged/Derailed N/A		11. Cars Releasing HAZMAT N/A			
				12. People Evacuated 0			
				13. Division System			
14. Nearest City/Town Huntley		15. Milepost (to nearest tenth) 211.8		16. State Abbr Code N/A MT			
				17. County YELLOWSTONE			
18. Temperature (F) (specify if minus) 81 F		19. Visibility (single entry) Code 1. Dawn 3. Dusk 2. Day 4. Dark 2		20. Weather (single entry) Code 1. Clear 3. Rain 5. Sleet 2. Cloudy 4. Fog 6. Snow 1			
				21. Type of Track Code 1. Main 3. Siding 2. Yard 4. Industry 1			
22. Track Name/Number Main Track		23. FRA Track Code Class (1-9, X) 4		24. Annual Track Density (gross tons in millions) 41.9			
				25. Time Table Direction Code 1. North 3. East 2. South 4. West 4			
OPERATING TRAIN #1							
26. Type of Equipment Consist (single entry)		1. Freight train 4. Work train 7. Yard/switching 2. Passenger train 5. Single car 8. Light loco(s). 3. Commuter train 6. Cut of cars 9. Maint./inspect.car		27. Was Equipment Attended? Code 1. Yes 2. No 1			
				28. Train Number/Symbol MRL 151			
29. Speed (recorded speed, if available) Code R - Recorded E - Estimated 16 MPH R		30. Trailing Tons (gross tonnage, excluding power units) 475			31. Method(s) of Operation (enter code(s) that apply) a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track c. Auto train stop i. Time table/train orders o. Positive train control d. Cab j. Track warrant control p. Other (Specify in narrative) Code(s) e. Traffic k. Direct traffic control f. Interlocking l. Yard limits e N/A N/A N/A N/A		
					31a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable 2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter 0		
32. Principal Car/Unit		a. Initial and Number		b. Position in Train			
(1) First involved (derailed, struck, etc)		MRL 151		1			
(2) Causing (if mechanical cause reported)		0		0			
				c. Loaded (yes/no) N/A			
				33. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box. Alcohol 0 Drugs 0			
				34. Was this consist transporting passengers? (Y/N) N			
35. Locomotive Units		a. Head End		Mid Train			
		b. Manual		c. Remote			
		d. Manual		c. Remote			
(1) Total in Train		1		0 0			
(2) Total Derailed		0		0 0			
				36. Cars			
				a. Freight b. Pass. c. Freight d. Pass. e. Caboose			
				(1) Total in Equipment Consist 4 0 0 0 0			
				(2) Total Derailed 1 0 0 0 0			
37. Equipment Damage		38. Track, Signal, Way, & Structure Damage		39. Primary Cause Code			
This Consist \$240,000.00		\$0.00		H222			
				40. Contributing Cause Code H605			
Number of Crew Members				Length of Time on Duty			
41. Engineer/Operators 1		42. Firemen 0		43. Conductors 1		44. Brakemen 1	
				45. Engineer/Operator Hrs 2 Mi 20		46. Conductor Hrs 2 Mi 20	
Casualties to:		47. Railroad Employees		48. Train Passengers		49. Other	
Fatal		0		0		0	
Nonfatal		1		0		0	
				50. EOT Device? 1. Yes 2. No 2		51. Was EOT Device Properly Armed? 1. Yes 2. No N/A	
				52. Caboose Occupied by Crew? 1. Yes 2. No N/A			
OPERATING TRAIN #2							
53. Type of Equipment Consist (single entry)		1. Freight train 4. Work train 7. Yard/switching 2. Passenger train 5. Single car 8. Light loco(s). 3. Commuter train 6. Cut of cars 9. Maint./inspect.car		A. Spec. MoW Equip. Code 6		54. Was Equipment Attended? Code 1. Yes 2. No 2	
						55. Train Number/Symbol N/A	
56. Speed (recorded speed, if available) Code R - Recorded E - Estimated 0 MPH N/A		57. Method(s) of Operation (enter code(s) that apply) a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track			58a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable		

57. Trailing Tons (gross tonnage, excluding power units)	N/A	c. Auto train stop d. Cab e. Traffic f. Interlocking	i. Time table/train orders j. Track warrant control k. Direct traffic control l. Yard limits	o. Positive train control p. Other (Specify in narrative) Code(s)	2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter
				e N/A N/A N/A N/A	0

59. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded(yes/no)	60. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol	Drugs
(1) First involved (derailed, struck, etc)	TTAX78699	1	yes		0	0
(2) Causing (if mechanical cause reported)	0	0	N/A	61. Was this consist transporting passengers? (Y/N)		N

62. Locomotive Units	a. Head End	Mid Train b. Manual c. Remote	Rear End d. Manual c. Remote	63. Cars	Loaded a. Freight b. Pass.	Empty c. Freight d. Pass.	e. Caboose
(1) Total in Train	0	0 0	0 0	(1) Total in Equipment Consist	14 0	0 0	0
(2) Total Derailed	0	0 0	0 0	(2) Total Derailed	1 0	0 0	0

64. Equipment Damage This Consist	\$0.00	65. Track, Signal, Way, & Structure Damage	\$0.00	66. Primary Cause Code	N/A	67. Contributing Cause Code	N/A
Number of Crew Members				Length of Time on Duty			

68. Engineer/Operators	0	69. Firemen	0	70. Conductors	0	71. Brakemen	0	72. Engineer/Operator	Hrs 0 Mi 0	73. Conductor	Hrs 0 Mi 0
Casualties to:	74. Railroad Employees	75. Train Passengers	76. Other	77. EOT Device?	1. Yes 2. No	2	78. Was EOT Device Properly Armed?	1. Yes 2. No	N/A		
Fatal	0	0	0	79. Caboose Occupied by Crew?	1. Yes 2. No	2					
Nonfatal	0	0	0								

OPERATING TRAIN #3

80. Type of Equipment Consist (single entry)	1. Freight train	4. Work train	7. Yard/switching	A. Spec. MoW Equip.	Code	81. Was Equipment Attended?	Code	82. Train Number/Symbol
	2. Passenger train	5. Single car	8. Light loco(s).		N/A	1. Yes 2. No	N/A	N/A
	3. Commuter train	6. Cut of cars	9. Maint./inspect.car					

83. Speed (recorded speed, if available)	Code	85. Method(s) of Operation (enter code(s) that apply)	85a. Remotely Controlled Locomotive?
R - Recorded		a. ATCS	0 = Not a remotely controlled
E - Estimated	N/A MPH 0	b. Auto train control	1 = Remote control portable
84. Trailing Tons (gross tonnage, excluding power units)	N/A	c. Auto train stop	2 = Remote control tower
		d. Cab	3 = Remote control transmitter - more than one remote control transmitter
		e. Traffic	
		f. Interlocking	
		g. Automatic block	
		h. Current of traffic	
		i. Time table/train orders	
		j. Track warrant control	
		k. Direct traffic control	
		l. Yard limits	
		m. Special instructions	
		n. Other than main track	
		o. Positive train control	
		p. Other (Specify in narrative)	
		Code(s)	
		N/A N/A N/A N/A N/A	

86. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded(yes/no)	87. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol	Drugs
(1) First involved (derailed, struck, etc)	0	0	N/A		N/A	N/A
(2) Causing (if mechanical cause reported)	0	0	N/A	88. Was this consist transporting passengers? (Y/N)		N/A

89. Locomotive Units	a. Head End	Mid Train b. Manual c. Remote	Rear End d. Manual c. Remote	90. Cars	Loaded a. Freight b. Pass.	Empty c. Freight d. Pass.	e. Caboose
(1) Total in Train	0	0 0	0 0	(1) Total in Equipment Consist	0 0	0 0	0
(2) Total Derailed	0	0 0	0 0	(2) Total Derailed	0 0	0 0	0

91. Equipment Damage This Consist	\$0.00	92. Track, Signal, Way, & Structure Damage	\$0.00	93. Primary Cause Code	N/A	94. Contributing Cause Code	N/A
Number of Crew Members				Length of Time on Duty			

95. Engineer/Operators	0	96. Firemen	0	97. Conductors	0	98. Brakemen	0	99. Engineer/Operator	Hrs 0 Mi 0	100. Conductor	Hrs 0 Mi 0
Casualties to:	101. Railroad Employees	102. Train	103. Other	104. EOT	1. Yes 2. No	N/A	105. Was EOT Device Properly	1. Yes 2. No	N/A		
Fatal	0	0	0	106. Caboose Occupied by Crew?	1. Yes 2. No						
Nonfatal	0	0	0								

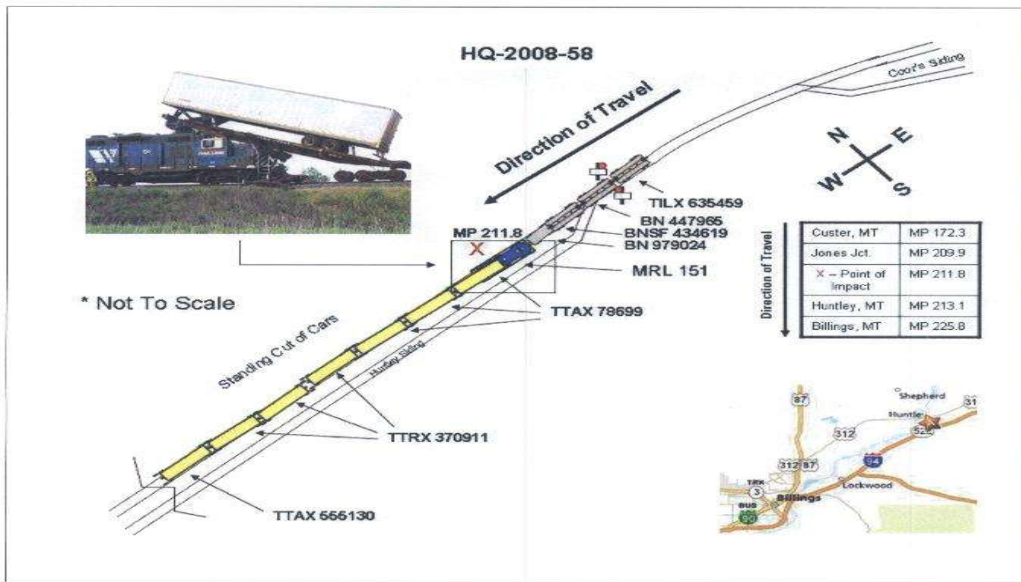
Highway User Involved				Rail Equipment Involved			
107. C. Truck-Trailer. F. Bus J. Other Motor Vehicle Code	A. Auto D. Pick-Up Truck G. School Bus K. Pedestrian	B. Truck E. Van H. Motorcycle M. Other (spec. in narrative)	N/A	111. Equipment	3. Train (standing)	6. Light Loco(s) (moving)	Code
				1. Train(units pulling)	4. Car(s) (moving)	7. Light(s) (standing)	
				2. Train(units pushing)	5. Car(s) (standing)	8. Other (specify in narrative)	N/A
108. Vehicle Speed (est. MPH at impact)	N/A	109. geographical Code	1. North 2. South 3. East 4. West	112. Position of Car Unit in			0

110. Position 1. Stalled on Crossing 2. Stopped on Crossing 3. Moving Over Crossing 4. Trapped				Code N/A	113. Circumstance 1. Rail Equipment Struck Highway User 2. Rail Equipment Struck by Highway User				Code N/A		
114a. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials? 1. Highway User 2. Rail Equipment 3. Both 4. Neither				Code N/A	114b. Was there a hazardous materials release 1. Highway User 2. Rail Equipment 3. Both 4. Neither				Code N/A		
114c. State here the name and quantity of the hazardous materials released, if any. N/A											
115. Type Crossing 1. Gates 2. Cantilever FLS 3. Standard FLS Warning 4. Wig Wags 5. Hwy. traffic signals 6. Audible				Code N/A	116. Signaled Crossing (See instructions for codes)				Code N/A	117. Whistle Ban 1. Yes 2. No 3. Unknown	
Code(s)				N/A	N/A	N/A	N/A	N/A	N/A	N/A	
118. Location of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach				Code N/A	119. Crossing Warning with Highway Signals 1. Yes 2. No 3. Unknown				Code N/A	120. Crossing Illuminated by Street Lights or Special Lights 1. Yes 2. No 3. Unknown	
121. Age 0		122. Driver's Gender 1. Male 2. Female		Code N/A	123. Driver Drove Behind or in Front of and Struck or was Struck by Second Train 1. Yes 2. No 3. Unknown				Code N/A	124. Driver 1. Drove around or thru the Gate 2. Stopped and then Proceeded 3. Did not Stop	
125. Driver Passed Highway Vehicle 1. Yes 2. No 3. Unknown				Code N/A	126. View of Track Obscured by (primary obstruction) 1. Permanent Structure 2. Standing Railroad Equipment 3. Passing Train 4. Topography 5. Vegetation 6. Highway Vehicle 7. Other (specify in narrative) 8. Not obstructed				Code N/A		
Casualties to:		Killed	Injured	127. Driver 1. Killed 2. Injured 3. Uninjured				Code N/A	128. Was Driver in the Vehicle? 1. Yes 2. No		
129. Highway-Rail Crossing Users		0	0	130. Highway Vehicle Property Damage (est. dollar damage)				0	131. Total Number of Highway-Rail Crossing Users (include driver)		
132. Locomotive Auxiliary Lights? 1. Yes 2. No				Code N/A	133. Locomotive Auxiliary Lights Operational? 1. Yes 2. No				Code N/A		
134. Locomotive Headlight Illuminated? 1. Yes 2. No				Code N/A	135. Locomotive Audible Warning Sounded? 1. Yes 2. No				Code N/A		

136. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED.

DEPARTMENT OF TRANSPORTATION FRA FACTUAL RAILROAD ACCIDENT REPORT FRA File # HQ-2008-58

136. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED.



## 137. SYNOPSIS OF THE ACCIDENT

On June 25, 2008, at 7:20 p.m., MDT, a westbound Montana Rail Link (MRL) freight train with locomotive No. MRL 151 collided with its own cut of cars which was left standing between the siding switches on the main track near Huntley, Montana, at milepost 211.8 on the MRL's 1st Subdivision. The collision occurred when MRL Train 151 was returning to the standing cut of cars after making switching moves at a nearby industry. The returning movement included three loaded hopper cars and one scale test car trailing MRL Train 151.

The impact of the collision caused the lead car from the standing cut of cars to climb the nose of MRL Train 151 cab shearing off the top of the cab. The conductor stated that he was ejected from the cab. He sustained non-life threatening injuries (sprained ankles, sore shoulder and a knee laceration). He was transported to a local hospital where he was treated and released.

The reported damage is \$240,000 (\$185,000 to the locomotive and \$55,000 freight cars). There were no damages reported to the track or signal structure and there was no release of hazardous materials or evacuation.

At the time of the accident it was daylight and clear with a temperature of 81° F.

The probable cause of this accident was the engineer's failure to comply with a "Proceed Restricting" block signal indication. This signal indication requires trains to proceed at restricted speed. The collision occurred due to the engineer's failure to control the speed of his train and not allowing sufficient braking distance.

## 138. NARRATIVE

## CIRCUMSTANCES PRIOR TO THE ACCIDENT

The crew of MRL Train 151 included a locomotive engineer, conductor, and a brakeman. They first went on duty at 5:00 p.m., on June 25, 2008, at the MRL Billings, Montana, switching yard. This is the home terminal for all crew members, and each of them received more than the required statutory off duty rest period prior to reporting for duty.

The crew was assigned to build their train in the Billings yard, then switch industries between Billings and Huntley, Montana, a distance of about 15 miles and then return to Billings. Upon reporting for duty, the crew conducted a job safety briefing and proceeded to the yard to build their train. The train was made up of cars located on three separate tracks.

After the crew finished building the train, it consisted of one locomotive, an empty automobile carrier railcar, three loaded covered hopper grain cars, and five articulated intermodal flat rail cars loaded with 14 trailers in a trailer-on-flatcar (TOFC) configuration. The train was 1,216 feet long and weighed 790 tons. The engineer checked the locomotive daily inspection card and determined that all test dates were current. The train departed eastward from Billings at about 6:00 p.m. According to the train crew interviews, the train departed Billings without conducting a test of the train air brakes as required by Federal Safety Regulations. A violation report was submitted for the crew's failure to conduct the air brake test required by Federal Safety Regulations.

The crew left the empty automobile carrier railcar at Lockwood, Montana, and then proceeded to Huntley. Upon arriving at Huntley the crew stopped the train between switches at Huntley on the Main Track just west of the Intermediate Block Signal. The mast of the block signal displays milepost number sign 211.8.

They removed the lead three covered hopper cars from the train and left the five TOFC (14 trailers) cars secured on the Main Track between the Huntley siding switches. They took the three covered hopper cars east about 1/4 mile to the Coor's Barley Plant. The brakeman remained at the switch. They then shoved the

train back to get enough room to increase the speed sufficient for all the three covered hoppers to be detached from the locomotive to roll down the Main Track after placing the locomotive into the Coor's Plant Industry Track. After completing this movement, they picked up a scale test car at the Coor's plant, pulled out onto the Main Track, and backed onto the three covered hopper cars. This movement was completed in order to align the cars to facilitate a future switching move.

After connecting to the three covered hopper cars, the train brake air hose was coupled between the covered hopper cars, the scale test car, and the locomotive. At this point, the trailing weight equaled about 475 tons. Meanwhile, the brakeman walked back to the cut of cars left on the Main Track. According to interviews and data from the locomotive event recorder, about 2 ½ minutes after the air was coupled to the four cars, the conductor boarded the locomotive and MRL Train 151 departed back towards the cars which they left between the siding switches on the Main Track at Huntley.

As the train moved west toward the cut of cars standing on the Main Track at Huntley, the locomotive engineer was seated at the controls on the right (north) side of the locomotive cab, short nose forward in the direction of movement. The conductor was seated in the rear seat on the left (south) side of the locomotive cab and was preparing to complete his paperwork for the work they just completed.

In the accident area, traveling from east to west and starting at milepost 211.0, there is tangent track for 2,400 feet, then a 1-degree curve to the right for about 1,600 feet, followed by tangent 600 feet to the point of the collision, and 6,000 feet or more beyond. There is a gradual ascending grade between .24-percent approaching the accident site to a level grade at the point of collision. Trains operate under the authority of a Traffic Control System (TCS) controlled by a train dispatcher in Missoula, MT. The railroad timetable direction and geographical direction are east and west. Timetable directions will be used throughout this report. The current Montana Rail Link (MRL) Timetable #14, effective 0001, MST, Sunday, August 26, 2007, and lists the maximum authorized speed for freight trains at 60 mph in the accident area.

## THE ACCIDENT

According to the locomotive event recorder and interviews, as the train returned the approximately 1/4 mile from the Coor's plant to the cut of cars left on the Main Track, the engineer immediately placed the locomotive throttle in position 8. Within approximately 1,400 feet, the train reached a recorded speed of 22 mph. The engineer stated he applied 10 pounds of train airbrake pressure approximately two car lengths east of the signal at milepost 211.74 and about 275 feet away from the cut of cars left standing on the Main Track. He stated that he felt no braking effect from the air brake application. The engineer said he then became aware of the impending collision and initiated an emergency train air brake application at about three car lengths (140 feet) prior to the impact and told the conductor to brace himself. The train had slowed to 16 mph when the collision occurred.

The locomotive struck the leading TOFC car (TTAX 78699) standing on the Main Track between the switches at Huntley. The impact of the collision caused car TTAX 78699 to climb the nose of the locomotive shearing off the cab from the bottom of the locomotive windshield to the top of the cab then coming to rest on top the locomotive at about a 30° angle. The conductor stated that during the collision he was thrown from the locomotive cab by the impact and landed next to the locomotive. Fearing that the platform might land on top of him, the conductor scrambled along on the ground to a location in a ditch along the south side of the tracks.

After the impact, the engineer dismounted the locomotive to search for the conductor. Upon finding him, he immediately called the MRL Billings Yardmaster on a cell phone to request an ambulance. A Sheriff's Deputy arrived on the scene shortly after the accident occurred and assisted in moving the conductor to a safe location to facilitate the ambulance crew access upon their arrival. The conductor was transported by the Worden Fire Department ambulance to the Billings Clinic Hospital at Billings, MT. The conductor was treated for a sprained ankle, shoulder injuries, and knee lacerations and released. The engineer and brakeman did not receive any injuries from the accident.

## ANALYSIS AND CONCLUSIONS:

The accident met the criteria for 49 CFR Part 219 Subpart C Post Accident Toxicological Testing. The engineer was tested and the results were negative. The conductor and brakeman did not receive Post Accident Toxicological Testing. A violation report was submitted for MRL's failure to test the conductor since

he was contemporaneously involved in the cause of the accident.

#### ANALYSIS:

FRA obtained fatigue related information, for the 10-day period preceding this incident including the 10-day work history (on duty/off duty cycles) for all of the employees involved.

#### CONCLUSION:

Upon analysis of that information FRA concluded fatigue was not probable for any of the employees.

According to the locomotive engineer interview, he did not notice any problems with the locomotive or the cars in his train during the trip to Huntley. The locomotive daily inspection card had been completed for this day prior to him going on duty and all test dates were current and up to date.

Interviews with the train crew disclosed that the required transfer train air brake test was not performed prior to departing the Billings Rail Yard. A violation report was submitted for crew's failure to conduct the train air brake test required by Federal Safety Regulations.

MRL mechanical personnel conducted single car air brake tests on the scale test car and the three covered hopper cars after the accident. The tests revealed worn brake shoes, but no defects that would affect the braking power of the systems were noted.

The locomotive air brake system was not tested by MRL. They informed FRA they intended to conduct a test, but damage to the locomotive was too severe to allow testing. The locomotive was subsequently sent to the shop to be dismantled.

After analyzing the locomotive event recorder data, FRA and MRL determined that aggressive train handling occurred during the movement back from the Coor's plant to the cut of cars standing on the main track, a distance of about 1,500 feet. In the distance of about 1/4 mile, the engineer operated the locomotive in throttle positions 7 & 8 reaching a recorded speed of 22 mph. This does not comply with Restricted Speed which requires being able to stop within one half the range of vision short of train, engine, railroad car, men or equipment fouling the track, stop signal, derail or switch lined improperly, looking out for broken rail, and not exceed 20 mph.

Since this movement was to be made at restricted speed, the maximum authorized speed for this movement was 20 mph. The applicable rule is contained in the General Code of Operating Rules, (GCOR) 6.20(A), in reference to return movements to a portion of a train left on Main Track at restricted speed. The signal at milepost 211.74 was solid red because the remaining portion of the train was occupying the block on the Main Track at this location. MRL Rule 9.1.13 allowed the train to pass the signal without stopping, but the crew was required to operate at restricted speed.

There were no hazardous materials involved in the accident and no evacuation was necessary. Damages were limited to the locomotive and the intermodal platform (TTAX 78699) which totaled \$240,000.

MRL subscribes to the General Code of Operating Rules (GCOR), Fifth Edition, and effective April 3, 2005. The train crew of MRL Train 151 failed to comply with the following GCOR rules:

#### GCOR 6.27 - MOVEMENT AT RESTRICTED SPEED

When required to move at restricted speed, movement must be made at a speed that allows stopping within half the range of vision short of:

- Train
- Engine
- Railroad car
- Men or equipment fouling the track
- Stop signal, or
- Derail or switch lined improperly



When a train or engine is required to move at restricted speed, the crew must keep a lookout for broken rails and not exceed 20 mph. comply with these requirements until the leading wheels reach a point where movement at restricted speed is no longer required.

#### GCOR 6.20 - EQUIPMENT LEFT ON MAIN TRACK

##### A. - Portion of Train Left on Main Track:

When necessary to leave a portion of a train temporarily on the Main Track, follow this procedure:

- Make return movement at restricted speed.

#### GCOR 6.22 - MAINTAINING CONTROL OF TRAIN OR ENGINE:

Crew members must consider train or engine speed, grade conditions, and air gauge indications to determine that the train or engine is being handled safely and is under control. If necessary, take immediate action to bring the train or engine under control.

In addition, the crew of MRL 151 also failed to comply with the following MRL Timetable and Special Instructions, effective August 26, 2007:

##### Rule 9.1.13 - RESTRICTED PROCEED SIGNAL ASPECT

Authorize passage beyond the signal at restricted speed.

The crew of MRL Train 151 also failed to comply with the following MRL Air Brake & Train Handling Rules (ABTHR), effective August 26, 2007:

##### MRL ABTHR Rule 100.11 - TRANSFER TRAIN MOVEMENT TESTS.

Test the air brake system on a train making a Transfer Train and yard movement that does not exceed 20 miles in one direction. Intermediate switching is permitted on Transfer Train movements. Test the air brake system on a Transfer Train as follows:

1. Couple brake pipe hoses between all cars.
2. Charge the brake system to at least 60 psi as indicated by a gauge or device at the rear of the train.
3. Make a 15 psi brake pipe reduction.
4. Verify that the brakes apply and remain applied on each car until release signal is given. Any car whose brakes release prior to signal being given to release the brakes may be re-tested once a determination must be made that brakes will remain applied until a release is initiated for a period of no less than 3 minutes.

##### NOTE:

When making retest, car must be charged to within 15 psi of the regulating valve setting, then make a 20 psi brake pipe reduction instead of 15 psi. Brakes shall remain applied until a release is initiated after a period of no less than three minutes.

##### NOTE:

Testing the air brake system as outlined above is also required before proceeding after adding cars during a Transfer Train and yard movement. If cars are set out during a Transfer Train and yard movement, determine that brake pipe pressure at the rear car has been restored before proceeding.

##### MRL ABTHR RULE 104.11 - CHARGING TIME CHART

When the brake system is uncharged and not equipped with an air flow meter, use the following chart to determine the minimum and maximum charging times:

- 2,500 feet or less: Minimum Charging Time - 8 minutes.

In addition and listed below, the MRL failed to comply with Federal Regulations associated with transfer train brake tests (§232.215) before leaving the Billings Rail Yard and also the MRL failed to test all employees for events that require post-accident toxicological tests (§219.201). These are listed as follows;

**§232.215 TRANSFER TRAIN BRAKE TEST:**

(a) A transfer train, as defined in § 232.5, shall receive a brake test performed by a qualified person, as defined in § 232.5 that includes the following:

(1) The air brake hoses shall be coupled between all freight cars;

(2) After the brake system is charged to not less than 60 psi as indicated by an accurate gage or end-of-train device at the rear of the train, a 15-psi service brake pipe reduction shall be made; and

(3) An inspection shall be made to determine that the brakes on each car apply and remain applied until the release is initiated by the controlling locomotive. A car found with brakes that fail to apply or remain applied may be retested and remain in the train if the retest is conducted as prescribed in § 232.205(c) (4); otherwise, the defective equipment may be moved only pursuant to the provisions contained in § 232.15, if applicable;

(b) Cars added to transfer trains en route shall be inspected pursuant to the requirements contained in paragraph (a) of this section at the location where the cars are added to the train.

(c) If a train's movement will exceed 20 miles or is not a transfer train as defined in § 232.5, the train shall receive a Class I brake test in accordance with § 232.205 prior to departure.

**§219.201 EVENTS FOR WHICH TESTING IS REQUIRED**

(a) List of events. Except as provided in paragraph (b) of this section, post-accident toxicological tests must be conducted after any event that involves one or more of the circumstances described in paragraphs (a)(1) through (4) of this section:

(2) Impact accident. An impact accident (i.e., a rail equipment accident defined as an "impact accident" in § 219.5) that involves damage in excess of the current reporting threshold, resulting in -

(i) A reportable injury; or

(ii) Damage to railroad property of \$150,000 or more.

**PROBABLE CAUSE AND CONTRIBUTING FACTORS:**

The FRA determined that the probable cause of this accident was the engineer's failure to comply with a "Proceed Restricting" block signal. This signal requires trains to proceed at restricted speed. The collision occurred due to the engineer's failure to control the speed of his train and not allowing sufficient braking distance.

(H222)-Automatic block or interlocking signal displaying other than a stop indication - failure to comply.

(H605)-Failure to comply with restricted speed in connection with the restrictive indication of a block or interlocking signal.