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Significant Risk Assessment – Industrial Railroad Policy



Potentially Fatal Risk	Critical Controls to Reduce or Eliminate
Derailment	Documented rail and track inspections
	Preventative maintenance of rolling stock and track, and locomotives
	Audits of rolling stock and track, with timely repairs
	Train inspections (locos, cars, etc.) – daily – incoming and outgoing
	Operational practices/procedures
	Geometry car usage
	Calculation of train make-up (number of empty to full, number locos, etc.)
	Use of de-railers – location, how many, what type
Critical Behaviors – Fit for duty; training and education; following procedures	
Switching	Weighing on flat ground
	LOTOTO
	De-railer at weight scale, head of every drop point
	Air brake system
	Red Zones (safety zones) established
	Use of brakeman and switchman (not just one person)
	Critical Behaviors – Good communication between operator and groundsmen; Training; following procedures
Run-a-ways	Use of operational procedures
	Maintenance practices
	Use of de-railers
	Block/chock/energy control
	Regular inspections and audits

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	Risk analysis
	Radio controlled crossing arms
	Restricted areas (rail yard, switch yard, etc.)
	PMs of locomotive, brake systems, conditions of cars, type (size, air system, etc.)
	Max weight restrictions specified within contractual agreements
	Calculation for weights and locomotive requirements, length of train, grade
	Critical Behaviors – Training; following procedures

Stop the Work Warnings (Red Flags) – Indicate potential unsafe behavior or lack of controls
Crossing signals not working
Noticeable damage to tracks
Defective railcars not being reported to the owners
Tracks are not being inspected
Handbrakes are not set in parked railcars
Wheels have not been evaluated for flat spots
Maximum speed limits have not been established and posted
Tonnage limits are not being followed
LOTOTO not in place for repairs and maintenance work
Significant risks and critical controls have not been communicated to employees
Dump doors are open when train is in motion
No procedure is in place for railroad crossings where vehicles or foot traffic is possible
Employees are not wearing high visibility clothing or vests
Maximum braking formulas are not being utilized when setting up the train make-up
Unauthorized passengers are on the train
Air brake test procedures have not been performed

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