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Significant Risk Assessment – Shovel Move Policy

Potentially Fatal Risk	Critical Controls to Reduce or Eliminate
Contacting an Energized Power Lines and Other Equipment/Structures	Pre-move preparation
	Evaluation of power line distances
	Driving route of travel to check for obstacles and clearances
	Lockout Tagout Tryout (LOTOTO)
	Surveying of power line distance from ground to line
	Use of a spotter in areas where power lines, equipment or structures are present
	Use of signage to designate the route
	Critical Behaviors – Stopping a move when unsure of power line distance, adhering to ground personnel directions, utilizing proper LOTOTO procedures
Loss of Shovel Power or Brakes Resulting in a “Runaway”	Place shovel cab and dipper in the uphill direction
	200 foot safety zone to the front and no equipment or people behind the shovel
	Use of a temporary stinger to manage the cable
	Signage to designate shovel move path
	Proper maintenance of braking system and other shovel components
	When motivator is used, it is positioned on the uphill side of the shovel
Track Fly Metal	No personnel or vehicles on side of shovel while in propel
	Temperature measurements on long haul routes to prevent overheating and fly metal potential
	Temperature checks of tracks done while shovel is stopped and dipper is down.

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	Critical Behaviors – Refraining from entering area to sides of shovel while in propel; ensuring controls are in place prior to measuring temperature inside safe zone (ie., shovel stopped, dipper down)
Shovel Fire from Overheating	Walking hydraulic shovels slowly in 800-900 foot increments
	Check shovel temperature to ensure it does not go above 180 F degrees
	Use of a water truck as a precaution should overheating occur
	Critical Behaviors – Take the shovel slow during move, ensure temperatures are checked every 800-900 feet during move

Red Flags – Indicate potential unsafe behavior or lack of controls
Unauthorized personnel anywhere within the established Safety Zone
No pre-move preparation or review
No Signage regarding “Shovel Move in Process” is in place or visible
No designated Safety Watch
Motivator improperly placed
No designated radio channel for the move.
No presence of a mine supervisor or shovel mechanics during the move
Dipper positions during the move are improperly placed
No water truck present during hydraulic move
No temperature monitoring during hydraulic move
Dozers or other equipment positioned within “line of fire” with tracks or counterweight
Stinger not being used to manage the cable when moving a shovel with the motivator
No use of LOTOTO where overhead power lines are within minimum clearing distances
No use of the FCX Energy Control Policies when moving around power lines
Employees on sides of shovel while it is in motion (propel)

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