

VI OPPORTUNITY STATEMENT:

Increased awareness of vehicle interaction related risks and controls thus elimination vehicle interaction (VI) related incidents.

Awareness and increased implementation of levels 1-6 controls and lower level technology implemented to support 1-6.

Focused implementation of levels 1-6 controls and higher level technology implemented to support/replace 1-6.

Technology integrated systems approach to levels 1-9 to reduce exposure to ALARP.

		1	2	3	4	5
		Company is primarily focused on legislative compliance with regards vehicle standards and operation.	Company is actively investigating the elimination of vehicle interactions through mine design, operating procedures and engineering controls.	Company is actively pursuing the elimination of vehicle interactions through mine design, operating procedures, monitoring operator behaviour and engineering controls.	Demonstrated success in the adoption of remote and or engineering controls to eliminate vehicle interactions. Coupled with the integrated use of digital data to optimise operational designs and monitoring of work practices.	Implemented leading industry practice in the design of remote and or engineering controls to eliminate vehicle interactions. Coupled with the integrated use of digital data to optimise industry designs and monitoring of work practices.
Design Guidelines	1. Site Requirements	The operational standards and designs are focused on the safety and health of employees and based on legislative compliance as a minimum standard.	The operational standards and designs are focused on the safety and health of employees and based on legislative compliance as a minimum standard. With ad-hoc VI controls and standards.	Vehicle interaction is identified as a critical hazard with the company having defined administrative, engineering and design standards.	Vehicle interaction is identified as a critical hazard with the company actively integrating all levels of control to eliminate the risk.	Vehicle interaction is identified as a key critical hazard with the company actively integrating all levels of control to exceed industry leading practices.
	2. Segregation Controls					
Operational Controls	3. Operating Procedures	Vehicle operational administrative controls comply with required legislative requirements as a minimum standard.	Vehicle operational administrative controls are defined and implemented across the operation.	Vehicle operational administrative controls are well defined and implemented across the operation. Coupled with effective monitoring that enables improvement in operator behaviour.	Administrative controls are integrated with engineering a intervention for non-compliance. Coupled with a continuous improvement in operator behaviour.	Administrative controls are integrated with engineering controls to ensure real time compliance with automated escalation and or intervention for non-compliance. Coupled with a continuous improvement in operator behaviour programs in order to exceed industry leading practices.
	4. Authority to Operate					
	5. Fitness to Operate					
	6. Operating Compliance					
Technology Controls	7. Operator Awareness*	Vehicles are operated in accordance with legislative requirements and operational standards with basic technology.	Vehicles are operated in accordance with legislative requirements and operational standards. With additional engineering controls implemented based on technology addressing operational specific safety needs.	VI engineering technology solutions have been implemented on critical pieces of equipment, as defined by operational critical hazard standards.	VI engineering technology solutions have been installed across all vehicles and digitally integrated with administrative controls and mine design standards.	VI engineering technology solutions have been installed across all vehicles and digitally integrated with administrative controls and mine design standards. Actively supporting technology development to improve industry leading practice.
	8. Advisory Controls**					
	9. Intervention Controls***					

* Technologies that provide information to enhance the operator ability to observe and understand potential hazards in the vicinity of the machine
** Technologies that automatically intervene and take some form of machine control to prevent or mitigate an unsafe interaction
*** Technologies that provide alarms and/or instruction to enhance the operator ability to predict a potential unsafe interaction and the corrective action required



Value Proposition	<ul style="list-style-type: none">Unwanted vehicle interactions common.Equipment damage common.High potential for injury/fatality exposure.Unreliable operator performance common.	<ul style="list-style-type: none">Unwanted vehicle reducing.Equipment damage reducing.Injury/fatality exposure reducing.Inconsistent reliable operator performance.	<ul style="list-style-type: none">Unwanted vehicle interactions uncommon.Major equipment damage uncommon.Injury/fatality uncommon.Generally reliable operator performance.	<ul style="list-style-type: none">Unwanted vehicle interactions rare.Major Equipment damage rare.Injury/fatality exposure rare.Mostly reliable operator performance.	<ul style="list-style-type: none">No Unwanted vehicle interactions.Equipment damage rare.Zero injury/fatality exposure.Highly reliable operator performance.
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