

VEHICLE SEGREGATION RISK ASSESSMENT TOOL

Region:	<input type="text"/>	Site	<input type="text"/>	Date	<input type="text"/>	Time	<input type="text"/>
Facilitator Name:	<input type="text"/>	Assistants	<input type="text"/>	Assistants	<input type="text"/>	<input type="text"/>	<input type="text"/>

Instructions for personnel completing this Vehicle Segregation Risk Assessment;

- It is recommended that a minimum of 3 persons conduct the assessment, one should be a Health & Safety Representative of the work group (if present at the worksite) or a person qualified or experienced in Health & Safety at the site to facilitate the assessment, and the others, members of the workgroup for the site, with at least one from overall site management.
- Complete the checklist below by ticking / marking the applicable score (Y, N, N/A) for each item.
- Assign a risk score for each activity using the matrix and decision charts for implementing further control measures below.
- Complete details of current controls in place or additional comments. Be sure to indicate if further control measures are required and detail the actions in the close-out section.
- Complete details including: Name, date and signature in the space provided.
- Return the completed form to the site manager, with cc to H&S representative, for corrective actions to be assigned, completed and closed out.

RISK MATRIX						HIERARCHY OF CONTROL
Likelihood	Consequences					<p>The Hierarchy of Control must be used when determining how risks are going to be Eliminated or Minimized.</p> <p>Start at No. 1 and work down the order.</p> <ol style="list-style-type: none"> Elimination – remove the hazard from the workplace. Substitution – use a different (safer) process, machine or chemical. Isolation - as much as possible, isolate the hazard or hazardous work practice from people. Engineering – install guards on machines, put in barriers around hazards. Administrative controls – use policies, training and signs to warn workers. Personal protective equipment (PPE) – use gloves, glasses, hearing protection etc. <p>PPE is always the last option used in the hierarchy of control as a means of protection!</p>
	1 - Minor	2 - Medium	3 - Serious	4 - Major	5 - Catastrophic	
A - Almost Certain	Moderate	High	Critical	Critical	Critical	
B - Likely	Moderate	High	High	Critical	Critical	
C - Possible	Low	Moderate	High	High	Critical	
D - Unlikely	Low	Moderate	Moderate	High	High	
E - Rare	Low	Low	Moderate	Moderate	Moderate	

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Risk Matrix Legends		
Rating	Consequence - Health & Safety	Consequence - Asset
1 - Minor	No treatment required or first aid	Slight Damage; no significant impact on operations; no loss in revenue
2 - Medium	Moderate injuries up to medical treatment	Minor Damage; damage to equipment; minor impact on operations; no loss in revenue
3 - Serious	Severe reversible injuries inclusive of lost time injury	Local Damage; severe damage to equipment; impact on part of operations; partial loss of revenue
4 - Major	Single fatality or permanent disability	Major Damage; major damage to equipment; delay in operations; short term loss in revenue
5 - Catastrophic	Multiple loss of life or permanent disabilities	Extensive Damage; long term impact on operations; long term loss in revenue

Rating	Likelihood
A - Rare	Will only occur in exceptional circumstances
B - Unlikely	Not likely to occur within the foreseeable future
C – Possible	May occur within the foreseeable future
D – Likely	Likely to occur once or frequently within the foreseeable future
E - Almost Certain	Almost certain to occur within the foreseeable future

Rating	Actions
Critical	Consider alternatives to doing the activity. Significant additional control measures must be implemented to ensure regulatory and/or internal protocol compliance. Consider additional controls that may feasibly bring the risk to as low as reasonably practicable (ALARP). Interim operations during process of identifying additional control measures must include elevated levels of risk communication and process management oversight to ensure control of the activity as a 'critical risk' operation.
High	Undertake the activity with existing controls in place if all regulatory requirements and internal protocols are met, at a minimum. Consider additional controls that may feasibly bring the risk to ALARP. If no other controls are feasible, elevate levels of communication and process management oversight to ensure control of the activity as a 'high risk' operation.
Moderate	Undertake the activity with existing controls in place. Consider additional controls that may feasibly bring the risk to ALARP.
Low	Undertake the activity with the existing controls in place. Controls are considered to be ALARP.

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Inspection item:	Y	N	N/A	Risk level	Existing Control Measures / Comments	Further Controls Required and Recorded?
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1. VISIBILITY CONDITIONS

Is there adequate visibility of thoroughfare in areas where pedestrians/traffic interact?						
Is there adequate visibility from lighting in vehicle operating areas before sunrise or after sunset?						
Is there adequate lighting for pedestrian movement before sunrise or after sunset?						

2. PARKING AREAS

Are parking areas clearly defined and segregated for light vehicles and heavy vehicles?						
Are controls in place at parking areas to prevent light vehicles and heavy vehicles rolling away in the event of brake failure? e.g. berms, earthen mounds?						
Are car and heavy vehicles parking areas provided with separate entry and exit points to allow one-way traffic flow?						
Are all parking areas on level ground and surfaces free from slip and trip hazards?						
Are controls in place for overhead hazards?						
Are there designated parking areas that separate light vehicles and heavy vehicles around offices, crushing plants and maintenance areas?						

3. ACCESS AND EGRESS

Are all entrance and exit points to the site clearly posted?						
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Do gates at the site entrance and exit areas have reflective signage for visibility at night?						
Are speed limit signs reflective to allow visibility during night-time operations?						
Are there signs and designated walkways in place for pedestrians in and around buildings?						
Are PPE requirements posted at entry of site and are all personnel wearing high-visibility clothing as per site requirements and/or where signs are posted?						
Are controls in place to keep pedestrians out of hazardous activity areas (e.g. parking areas, paths between shops, operations areas) and directives provided through signs or in VSP orientation?						
Are operational areas sign posted with "No Unauthorized Access" signage?						
Are visitors restricted from entering operational areas unless escorted by site personnel?						
Is there effective signage to identify overhead conveyors, powerlines, steep gradients, bridges and drains?						
Are all roadways clearly signposted with traffic control requirements? e.g. site speed limits, stop signs, one way, keep left; give way as per road rules under the road traffic act?						
Are heavy vehicle waiting, tarping and clean off areas signposted?						

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Inspection item:	Y	N	N/A	Risk level	Existing Control Measures / Comments	Further Controls Required and Recorded?
Is signage clearly visible on site when travelling in light vehicles? e.g. Not blocked by vegetation, stockpiles or materials?						
Are all entrance and exit points to the site clearly posted?						
Do gates at the site entrance and exit areas have reflective signage for visibility at night?						
4. SPEED LIMITS						
Are there designated speed limits for parking areas, offices, scales and workshop areas?						
Are there designated speed limits for primary and secondary roads? e.g. side and haul roads						
Are there designated speed limits around crushing equipment and other processing equipment?						
Are there designated speed limits for benches and levels, stockpiles and waste dumps?						
5. SURFACES						
Are all corners on levelled ground or provided with a positive camber (no negative cambers)?						
Are all roadways, benches and levels and waste dumps provided with drainage to prevent water pooling?						
Are walkways and surfaces where pedestrian access and egress free from slip / trip hazards?						
Are roadways where traffic operates free from road condition hazards?						

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Are roadways and parking areas free of stored materials, oil spills and rubbish?						
Is there a maintenance program in place for regular inspection, maintenance and repairs to pathways, roadways, signs etc.?						
6. EDGE PROTECTION AND RUNAWAY PROVISIONS						
Are safety berms in place on all edges of haul roads and embankments?						
Is access into areas where there are unprotected edges (no berms) on embankments being effectively controlled to prevent entry? e.g. blocked off						
Are safety banks a minimum of axel height of the largest vehicle and located minimum distance from the edges of embankments?						
Are safety banks made of suitable material to slow and stop a vehicle						
Are safety banks and windrows of a consistent form and free from erosion?						
Where safety berms are implemented on a slope to slow runaway heavy vehicles, are they of a consistent form and free from erosion?						
WHERE A RISK ASSESSMENT HAS IDENTIFIED VEHICLE RUNAWAY PROVISIONS ARE REQUIRED, ANSWER THE FOLLOWING QUESTIONS BELOW.						
Are escape ramps wide enough to accommodate the largest vehicle on site and free from erosion?						
Are the escape ramps easy to access in the event of a runaway emergency?						
Is the material used in the escape ramp providing high rolling resistance and sinking capabilities to stop vehicles?						

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Are escape ramp(s) of a suitable length to allow the vehicle time to stop in a runaway emergency?						
7. TRAFFIC MOVEMENT						
Is traffic entering and leaving the site in a safe manner?						
Have light vehicle and heavy vehicles right-of-way rules and other traffic controls been established and clearly communicated through signage?						
Are one-way roads signposted and clearly communicated to all users?						
Can light vehicle and heavy vehicle operators communicate clearly with each other? e.g. via VHF / UHF radio						
Are there provisions to manage high traffic volumes on site?						
Do one-way roads have control measures in place to allow safe passing (e.g. 1.5 times the width of the largest tired vehicle accessing the road, pull-out areas, communication procedures)?						
Are two-way roads 3 times the width of the largest tired vehicles passing side by side?						
8. LIGHT VEHICLES AND MOBILE PLANT						
Are light vehicles and/or heavy vehicles regularly inspected and serviced? e.g. pre-start inspections conducted, scheduled maintenance servicing plans						
Are light vehicles and or heavy vehicles clearly visible to pedestrians and other operators? e.g. vehicle mine flags, hi-visibility reflective strips, amber flashing light, lights on						

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Are the Ground Engaging Tools (boom or bucket) on all load-shifting equipment lowered when travelling or grounded when parked up?						
Is there sufficient room for light vehicles and heavy vehicles to load out from stockpiling / sales areas?						
Are operational areas clear of personnel where light vehicles, heavy vehicles and other equipment operate?						
Are heavy vehicles operating on slopes or uneven ground that may cause a loss of control or stability?						
Are there systems in place to ensure operators can be contacted immediately in the event of a site emergency?						
Do light vehicles and heavy vehicles maintain a minimum clearance between vehicles when travelling on roads as per operating procedures or traffic management plan? e.g. 100f – 150f distance exclusion zone						
9. HIGH RISK AREAS						
Is there a procedure in place to manage heavy wet weather conditions (e.g. pooled water or poor visibility, ice, dust, pooled water, fog, rain, heat, slippery conditions)?						
Are vegetation and materials managed to provide a clear view of intersections and signage at all times?						
Are blind corners around buildings fitted with convex mirrors to identify on-coming traffic or other personnel?						

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Have risk controls been implemented to manage blind spots where they cannot be eliminated?						
Are load-bearing structures and power poles protected with earthen mounds or barriers where there is a risk of contact?						
Is there signage to identify clearance distances between overhead structures and power lines?						
Is there signage stating "Stop" at railway line crossings? (If applicable)						
Is there signage on the side access tracks of railway lines stating "maintain 3m clearance from railway tracks at all times"?						
Have risk controls been developed for light vehicles and heavy vehicles to operate at night?						
10. DESIGNATED / RESTRICTED / UNAUTHORIZED AREAS						
Is there signage to identify designated waiting, tarping and clean off areas for heavy vehicles (road trucks)?						
Are there clearly defined loading / unloading areas? e.g. for deliveries, couriers, etc.						
Are designated loading / unloading areas provided with stable surfaces?						
Is there a designated refueling area allocated at the site?						
Are refueling areas and battery recharge stations protected by physical barriers?						
Are there clearly defined and demarcated safe areas?						

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Are safe areas protected by physical barriers?						
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11. INSTRUCTION AND TRAINING

Are all drivers / operators instructed and trained in the site traffic and pedestrian management requirements?						
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12. SIGN OFF

Persons Conducting Assessment

Signature(s)

Date of Report

13. CORRECTIVE ACTION PLAN

Action No	Action required	Responsibility	Completion Date	Review Date
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				