RISK ASSESSMENT

Pre-Start Hazard Assessment (PHA) – Heavy Trailer Operation (Dolly, End Tipper, Low Loader, Drop Deck, Skel, Tag, Flat Deck/B-Double)

Form Reference:	ISO-BMS-RA-037
Plant/Vehicle/Machine Type:	Bogie & Tri Dolly / Tri-Axle End Tipper Trailer / Quad Axle Low Loader / Tri Drop Deck / Skeletal Trailer / Tag Trailer / Flat Deck B-Double
Project/Location:	

Purpose & Scope: This Pre-Start Hazard Assessment (PHA) identifies the tasks, hazards, and required control measures for the safe operation of this vehicle across Consolidated Group of Companies (CG/CTS/JG) sites, including Pilbara mining and civil construction environments. It must be read, understood, and signed by every operator prior to first use, and reviewed whenever conditions, plant, or the system of work change.

ALL OPERATORS MUST SIGN BELOW TO ACKNOWLEDGE THEY HAVE READ AND UNDERSTOOD THIS PHA, AT LEAST ONCE, PRIOR TO THE OPERATION OF THIS MACHINE.

Name	Date	Time	Signature

Approval & Sign-Off

Supervisor/s Responsible for this Document:	
Full Name:	
Location/Project ID:	
Date:	
Signature:	

Follow-Up Review Triggers

Follow-up trigger – review this PHA on change to: use of plant, system of work, plant environment, new information, or plant modification.	Y	N
Is the plant designed to perform the task?	☐	☐
Has the plant been modified from the original condition?	☐	☐

Follow-up trigger – review this PHA on change to: use of plant, system of work, plant environment, new information, or plant modification.	Y	N
Is the plant in good working condition and free of leaks, damage, mud and vegetation build-up?	☐	☐
All identified action items closed out/addressed (plant checks)?	☐	☐
Is the plant safe to operate? (on completion of PHA and any action closures)	☐	☐

Task, Hazard & Control Assessment

Task	Hazard	Initial Risk	Current Control Measures	Residual Risk	Responsible
PRE-START					
Operator competency & fitness for work	Unqualified, unlicensed, unfit, or fatigued operator	**H17**	• Operator holds current VOC (Verification of Competency) for this specific plant item and has completed site induction. • Fit for Work declaration completed; zero tolerance for alcohol and non-prescription drugs. • No operation while affected by fatigue, medication, drugs or alcohol - report to supervisor immediately if unfit.	**L4**	Operator
Pre-start inspection	Undetected plant defect leading to failure during operation	**H17**	• Complete documented pre-start/prestart book covering the items specific to this plant (see below), guards, isolators, e-stops, reversing alarm, beacon, fire extinguisher, first aid kit and spill kit. • Regular scheduled servicing/maintenance per manufacturer's schedule; defects tagged out and reported - do not operate a tagged/defective item. • Registration/inspection current where applicable.	**M8**	Operator
COUPLING & COMBINATION (ALL TRAILER TYPES)					
Coupling/uncoupling prime mover, dolly and trailer(s)	Crush injury coupling/uncoupling, or trailer/dolly runaway if not correctly secured	**H17**	• Trailer(s)/dolly parked on level ground with park brake applied and wheels chocked before uncoupling. • Fifth wheel/coupling and dolly drawbar/pintle connections visually confirmed locked, and air/electrical lines connected, before moving off; pre-trip coupling check completed every time. • No personnel between units during coupling manoeuvres.	**M8**	Driver

Task	Hazard	Initial Risk	Current Control Measures	Residual Risk	Responsible
Combination mass and dimension compliance	Non-compliance with registered combination mass, dimension, or PBS limits	**H17**	• Combination configuration confirmed against registered/PBS approval for the specific trailer(s) and dolly coupled. • Load ticket/weighbridge check completed where required; combination mass kept within registered limits.	**M8**	Driver
BOGIE & TRI DOLLY					
Dolly coupling and towing	Instability or disconnection towing a converter dolly between trailers	**H17**	• Drawbar/pintle hook and safety chains inspected and confirmed secure before towing; dolly tyres and running gear checked at pre-start. • Dolly parked on level ground with its own park brake/chocks applied when uncoupled and left standing. • Extra caution reversing or manoeuvring with a dolly in the combination - the additional articulation point changes the combination's swept path.	**M8**	Driver
TRI-AXLE END TIPPER TRAILER					
Rollover / tip-over while tipping	Combination instability or rollover while the trailer's tipper body is raised	**H18**	• Select a level, stable, compacted tipping location; ground assessed for soft spots and edge stability before positioning. • Combination fully stopped and level before raising the body; do not tip on a cross-slope or with the combination angled. • No travelling with the body raised; do not tip in high wind conditions that could affect body stability.	**M9**	Driver
Exclusion zone during tipping	Struck-by injury from the raised body or discharging load	**H17**	• Exclusion zone maintained on the discharge side and around the full combination while the body is raised. • Spotter used where ground crew or other plant are working nearby.	**M8**	Driver
QUAD AXLE LOW LOADER (OVERSIZE/HEAVY HAULAGE)					
Oversize/overmass load transport	Collision, rollover, or permit non-compliance transporting oversize or heavy plant on the low loader	**H18**	• Permit and route approval confirmed before departure, including any pilot/escort vehicle requirements; route assessed for overhead clearances and bridge/culvert load limits. • Load (typically excavators, dozers, or other heavy plant) secured with rated chains at manufacturer-specified tie-down points	**M9**	Driver / Transport Team

Task	Hazard	Initial Risk	Current Control Measures	Residual Risk	Responsible
			and confirmed by a second person before departure. • Loading ramps rated for the plant's weight; spotter directs all loading/unloading movements.		
Deck height and load stability	Instability from a high centre of gravity when transporting tall or top-heavy plant	**H14**	• Load height checked against route clearance requirements before departure. • Speed reduced on corners and uneven road surfaces given the load's height and mass.	**M9**	Driver
TRI DROP DECK					
Loading equipment with reduced deck height	Instability loading taller equipment that requires the drop-deck's lower loading height	**H14**	• Ramps and loading area assessed for the specific equipment being loaded; spotter directs the manoeuvre. • Load secured with rated chains/straps at manufacturer-specified tie-down points before departure.	**M9**	Driver
SKELETAL TRAILER					
Container twist-lock engagement	Container detachment in transit from incomplete twist-lock engagement	**H17**	• All twist-locks visually confirmed engaged and locked before departure - a container that is merely resting on the trailer without locks engaged is not secure. • Twist-lock condition inspected at pre-start; damaged or seized locks reported and not used.	**M8**	Driver
Container loading/unloading	Crush injury or trailer instability during container lift-on/lift-off	**H17**	• Trailer parked on level ground with park brake applied during container handling; no personnel on or under the trailer during lifting. • Positive communication with the crane/reach stacker operator before and during the lift.	**M8**	Driver
TAG TRAILER					
Loading via ramps	Rollover or loss of control loading plant onto the tag trailer via its ramps	**H17**	• Ramps correctly angled, secured, and rated for the equipment's weight before loading. • Plant driven on slowly and straight with a spotter directing the manoeuvre. • Load secured with rated chains at manufacturer-specified tie-down points immediately after loading.	**M8**	Driver
FLAT DECK / B-DOUBLE					

Task	Hazard	Initial Risk	Current Control Measures	Residual Risk	Responsible
Load restraint on an open flat deck	Load shift or loss in transit from inadequate restraint on an open deck	**H17**	• Load restrained per load restraint guide requirements - dunnage, straps/chains and edge protection used as appropriate to the load type. • Restraint checked at the first opportunity after departure and at rest stops on longer transits. • Tautliner/curtain (where fitted) fully secured before departure; airbag suspension checked and set correctly for the load.	**M8**	Driver
B-double combination handling	Jack-knife or rollover given the B-double's additional articulation point and length	**H17**	• Extra caution on tight turns, roundabouts and reversing given the combination's increased length and swept path. • Obey B-double route restrictions and permit conditions for the road network being used.	**M9**	Driver
TRAVEL, BREAKDOWN & MAINTENANCE (ALL TRAILER TYPES)					
Travel on haul roads and public roads	Collision, jack-knife, or rollover given combination length and mass	**H18**	• Obey site speed limits, signage and give-way rules; IVMS/journey management followed where required by client. • Seatbelt worn at all times; no handheld mobile phone use while driving.	**M9**	Driver
Reversing the combination	Struck-by or jack-knife injury reversing a multi-trailer combination	**H17**	• Spotter used for all reversing manoeuvres; reversing alarm and camera (where fitted) operational. • Reversing carried out slowly with awareness of each unit's swing path.	**M8**	Driver
Roadside breakdown	Struck-by from passing traffic while stopped on the traffic side of the combination	**H14**	• Position the combination as far off the road as possible; hazard lights on. • Reflective vest worn; reflective triangles placed at correct distance front and rear. • Stay with the vehicle and contact supervisor for assistance.	**M9**	Driver
Maintenance and servicing	Injury during servicing, or unit returned to service with an unresolved defect	**M8**	• Trailer(s)/dolly isolated (chocked, park brake applied) before any maintenance task begins. • Coupling, twist-locks, running gear, tipping mechanism (where applicable) and tie-down points inspected per service schedule; defects tagged and reported immediately.	**L4**	Driver / Mechanical Team

Post-Task Activities

Post-Task Activities	Y	N
Ensure all tools are collected & returned to store/workshop.	☐	☐
Remove all waste materials from the area & place in the appropriate bins.	☐	☐
Report any damaged equipment.	☐	☐
Remove any barricades erected if no longer required.	☐	☐
Leave area clear of hazards.	☐	☐
Check area for hydrocarbon spillages.	☐	☐
Remove isolations and complete any permits/certificates if applicable.	☐	☐
Clean the cabin for the next person on shift to ensure a healthy work environment.	☐	☐

Additional Notes

Important: Every person on site must read this document and be familiarised with the underlying risks associated with operating this vehicle. It is the site supervisor's responsibility to check every team member has been briefed and has signed to acknowledge. Please add a note for any new risk identified during operation.

Risk Matrix

Likelihood \ Consequence	1 Insignificant No injury / near miss	2 Minor First aid / medical treatment	3 Significant LTI or restricted work duties	4 Major Fatality or serious permanent injury	5 Catastrophic Multiple fatalities – 50 or more health effects
Almost certain – Expected to happen	**H11**	**H16**	**E20**	**E24**	**E25**
Likely – Could happen frequently	**M7**	**H12**	**H17**	**E22**	**E23**
Possible – Could happen occasionally	**L4**	**M8**	**H13**	**H18**	**E21**
Unlikely – May occur sometime	**L2**	**L5**	**M9**	**H14**	**E19**
Rare – May only occur in exceptional circumstances	**L1**	**L3**	**M6**	**H10**	**H15**

Risk Rating – Actions Required After Ranking Risk

E STOP	H REVIEW	M PROCEED	L PROCEED
Eliminate or reduce the hazard to acceptable level (e.g. Medium or Low) in order to proceed	Controls to reduce hazard as far as reasonably practicable	With stated controls and supervision	And monitor for changes in conditions

Control the Risk – Hierarchy of Controls

Hierarchy of Controls	Examples of Controls
Elimination	• Design change, change of construction methodology
Substitution	• Use safer substance/chemical • Environmental catchments/sedimentation pools
Isolation	• Guards on power tools; effective screens, barriers and edge protection • Enclose noisy machinery; environmental swales, booms or barriers, paint washout station
Engineering	• Earth leakage device (safety switch) on electrical sources • Use a machine to lift heavy objects; use scaffold rather than a ladder as a working platform
Administration	• Change work practices and safe work method procedures • Tagging and testing procedures or waste sorting
PPE	• Hard hats, glasses, hearing protection, hi-vis vests, safety boots/shoes • (Note: PPE should be the last option to protect people)