MCK GROUP – HS-RA-001 MOXY RISK ASSESSMENT

Worker-Accessible App Extract – Master Document: HS-RA-001 Risk Assessment Register V1.1

Related Documents: HS-PR-001 Risk Assessment Procedure; HS-PR-002 Daily Plant Inspection Procedure; HS-PR-003 Personal Risk Assessment (Take 5) Procedure; HS-PR-005 Incident Investigation & Reporting Procedure; OP-PR-003 Workshop Procedure; OP-PR-017 Unsafe Plant Isolation Procedure; Fatigue Management Procedure; Working Alone Procedure; Spill Management & Containment Procedure; Operating Mobile Plant SWMS; Loading & Unloading Plant & Equipment SWMS; Relevant task-specific SWMS; Plant Maintenance Register; Training & Competency Register; Relevant EMP and SSMP; MCK Group IMS Registers Master.

Risk ID	Risk Event / Activity	Hazard	Causes	Potential Impacts	Current Controls	Initial Risk	Residual Risk
MX-001	Pre-start inspection	Undetected mechanical or safety defect	Inspection not completed, defect overlooked or not reported	Plant failure, collision, rollover, injury	Daily Plant Inspection; defect reporting; maintenance system; operator checks before use	15	4
MX-002	Operator competency	Untrained or unauthorised operation	Inadequate competency verification or unfamiliarity with articulated dump truck	Serious injury, rollover, collision, plant damage	Competency verification; training records; supervision; manufacturer instructions; site induction	15	4
MX-003	Mounting and dismounting	Slip or fall from plant	Mud, damaged steps, poor three-point contact	Sprains, fractures, lost time injury	Three points of contact; clean access steps; suitable footwear; no jumping from plant	9	4
MX-004	Starting and moving Moxy	Collision with people or plant	Blind spots, poor communication, people in operating area	Crushing, collision, serious injury or fatality	Exclusion zones; competent operator; horn; mirrors/cameras where fitted; radios; pre-start communication	15	4
MX-005	Reversing	Striking person, vehicle or object	Restricted rear visibility, alarms not heard, congestion	Serious injury, fatality, property damage	Reversing alarm; mirrors/cameras; exclusion zones; spotter where required; low-speed reversing	15	4
MX-006	Operating on slopes	Moxy rollover	Excessive gradient, side travel, high centre of gravity, poor ground	Fatality, serious injury, major plant damage	ROPS; seatbelt; competent operator; slope assessment; manufacturer limits; controlled speed	15	4
MX-007	Operating near embankments or drop-offs	Edge collapse / rollover	Soft shoulders, hidden voids, excessive proximity to edge	Fatality, serious injury, plant loss	Safe setback; ground assessment; designated haul routes; berms where required; spotter	15	4
MX-008	Operating on soft or unstable ground	Bogging or loss of stability	Saturated ground, weak fill, buried voids	Rollover, plant damage, recovery risk	Ground assessment; weather monitoring; approved haul routes; competent operator	15	4
MX-009	Articulated steering area	Crush / pinch point	Person enters articulation zone during movement or maintenance	Crushing, serious injury or fatality	Exclusion from articulation zone; plant stopped and isolated before inspection; warning decals	15	4
MX-010	Haul road travel	Collision with other mobile plant	Multiple machines, intersections, poor visibility	Serious injury, fatality, plant damage	Designated haul routes; radio communication; right-of-way rules; speed controls; separation distances	15	4
MX-011	Haul road condition	Loss of control due to poor surface	Potholes, loose material, corrugations, wet or slippery road	Rollover, collision, plant damage	Haul road inspections; grading/maintenance; speed management; weather monitoring	15	4
MX-012	Loading by excavator or loader	Struck by bucket / falling material	Poor positioning, operator miscommunication, overloading	Cab damage, serious injury, plant damage	Designated loading position; radio/visual communication; operator remains in cab; controlled loading	15	4
MX-013	Overloading body	Excessive vehicle weight / instability	Too much material, uneven loading, poor load estimation	Rollover, brake overload, tyre damage, plant damage	Load limits; competent loading operator; visual load checks; supervisor oversight	15	4
MX-014	Uneven load distribution	Reduced stability	Material loaded to one side or shifted during travel	Rollover, tyre/suspension overload, loss of control	Even loading; controlled travel; avoid sharp turns; inspect load before travel	15	4
MX-015	Tipping / unloading material	Moxy rollover while body raised	Uneven or soft ground, side slope, material sticking in body	Fatality, serious injury, major plant damage	Level stable tipping area; assess ground; body raised only when stationary; competent operator; exclusion zone	15	4
MX-016	Raised body	Contact with overhead obstruction or powerline	Body raised beneath services, trees or structures	Electrocution, structural damage, fatality	Check overhead clearance; identify powerlines; designated tipping areas; exclusion distances	15	4
MX-017	Material sticking in body	Sudden release / instability	Wet clay, sticky material, uneven body load	Rollover, unexpected movement, equipment damage	Level tipping area; controlled body operation; do not jerk machine to release load; supervisor assistance	15	4
MX-018	Driving with body raised	Collision / rollover / structural damage	Operator error, incomplete lowering after tipping	Fatality, serious injury, overhead strike	Warning systems where fitted; visual confirmation body fully lowered; controlled departure	15	4
MX-019	Braking on haul roads	Brake fade or failure	Long descents, overloading, poor maintenance	Loss of control, collision, rollover	Appropriate gear selection; speed control; maintenance system; pre-start brake checks	15	4
MX-020	Tyres and wheels	Tyre failure or wheel loss	Damage, low pressure, excessive wear, loose components	Loss of control, rollover, road hazard	Daily visual inspection; tyre maintenance; wheel security checks; defect reporting	15	4
MX-021	Hydraulic body hoist system	High-pressure hydraulic failure	Damaged hose, fitting failure, poor maintenance	Fluid injection injury, uncontrolled body movement, spill	Daily inspection; preventative maintenance; body support where required; isolation/depressurisation before repair	10	4
MX-022	Engine and exhaust area	Fire from hot surfaces or accumulated debris	Dry vegetation, oil leaks, debris around engine/exhaust	Plant fire, bushfire, injury, environmental damage	Daily inspection; clean engine bay; fire extinguisher where fitted; leak control	15	4
MX-023	Refuelling	Fuel spill or fire	Overfilling, hose failure, ignition source	Environmental contamination, burns, fire	Spill kits; controlled refuelling; trained personnel; no ignition sources; inspections	12	4
MX-024	Dust on haul routes	Reduced visibility and dust exposure	Dry roads, traffic, wind	Collision, respiratory irritation, environmental nuisance	Water cart/dust suppression; speed control; spacing between vehicles; enclosed cab where fitted	12	4
MX-025	Noise and whole-body vibration	Operator exposure	Extended travel on rough haul roads, poor seat condition	Fatigue, hearing damage, musculoskeletal discomfort	Enclosed cab where fitted; maintained seat; hearing protection where required; breaks	9	4

MX-026	Maintenance and repairs	Unexpected movement or stored energy	Inadequate isolation, raised body, hydraulic pressure	Crushing, serious injury, fluid injection	Unsafe Plant Isolation Procedure; competent maintenance personnel; body prop/support where required; isolate/depressurise systems	**15**	**4**
MX-027	Remote or isolated operation	Delayed emergency response	Communication blackspots, remote forestry or park work	Serious injury escalation, delayed rescue	Working Alone Procedure; check-ins; radios/phones; emergency contacts; site location details; first aid resources	**10**	**4**
MX-028	Fatigue during prolonged haulage	Reduced concentration and reaction time	Long shifts, repetitive haul cycles, heat, travel	Collision, rollover, poor judgement	Fatigue Management Procedure; scheduled breaks; fit-for-work expectations; supervisor monitoring	**15**	**4**
MX-029	Environmental disturbance from haul routes	Erosion, rutting or work outside approved limits	Repeated traffic, wet ground, poor drainage	Environmental harm, access damage, client/regulatory action	EMP/SSMP controls; approved haul routes; drainage maintenance; weather restrictions	**12**	**4**
MX-030	Recovery of bogged or disabled Moxy	Stored energy / tow equipment failure	Incorrect recovery points, unsuitable equipment, people in line of pull	Fatality, serious injury, plant damage	Planned recovery; rated recovery points and equipment; exclusion zone; competent personnel; clear communication	**15**	**4**
MX-031	Prolonged plant operation	Psychosocial hazards	Fatigue, production pressure, remote work, poor communication, stressful events	Reduced concentration, poor decisions, increased incident risk	Fatigue management; realistic workloads; supervisor support; regular communication; breaks; fit for work	**9**	**4**
MX-032	Plant operation	Mechanical failure during operation	Brake, steering, transmission, track or component failure	Loss of control, collision, rollover, serious injury, plant damage	Preventative maintenance; daily inspections; defect reporting; competent operators	10	4
MX-033	Working in hot or adverse weather	Heat stress / environmental exposure	High temperatures, humidity, prolonged sun exposure, dehydration	Heat stress, fatigue, reduced concentration, illness	Drinking water; shaded breaks; suitable PPE; work/rest regime; weather monitoring	9	4
MX-034	Manual handling	Hazardous manual tasks	Handling tools, hoses, equipment and heavy components; awkward postures during inspections and maintenance	Musculoskeletal injuries, strains and sprains	Mechanical aids; minimise manual lifting; suitable work positioning; team handling where appropriate; Manual Handling Procedure	9	6

Controlled Document Notice: This document is a worker-accessible extract from the MCK Group HS-RA-001 Risk Assessment Register. The controlled master register contains the complete risk assessment, action tracking and review information. Refer to the current controlled version for full details.