MCK GROUP – HS-RA-001 MULCHER 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; Vegetation Clearing & Mulching SWMS; Hazardous Tree Removal & Chainsaw Operations 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.

Brendan McKenna Earthmoving

Risk ID	Risk Event / Activity	Hazard	Causes	Potential Impacts	Current Controls	Initial Risk	Residual Risk
MU-001	Pre-start inspection	Undetected mechanical or safety defect	Inspection not completed, defect overlooked or not reported	Plant failure, thrown-object event, fire, injury	Daily Plant Inspection; defect reporting; maintenance system; operator checks before use	15	4
MU-002	Operator competency	Untrained or unauthorised operation	Inadequate competency verification or unfamiliarity with mulcher controls	Serious injury, plant damage, uncontrolled debris	Competency verification; training records; supervision; manufacturer instructions; site induction	15	4
MU-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
MU-004	Starting and moving mulcher	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
MU-005	Mulching operations	Thrown rocks, timber or debris	Rotor contacts hidden objects, stones, metal or hard timber	Serious injury or fatality, property damage	Large exclusion zone; guarding/deflectors; work area inspection; controlled operating speed; no persons in discharge zone	20	4
MU-006	Working near public or traffic	Thrown debris reaching public area	Insufficient separation, poor barriers, hidden debris	Serious public injury, vehicle/property damage, complaints	Work-area closure where required; barriers/signage; large exclusion zone; traffic/public interface controls	15	4
MU-007	Rotor and cutting head	Contact with rotating components	Operator or worker approaches before complete stop	Amputation, fatality or serious injury	No access while rotor moving; shutdown; isolation; wait for complete stop; guarding maintained	15	2
MU-008	Blocked mulcher head	Unexpected release of stored energy	Material jam, rotor tension, hydraulic pressure	Crushing, laceration, serious injury	Shutdown and isolation; depressurise systems; competent personnel; tools used instead of hands where possible	15	2
MU-009	Operating on slopes	Mulcher rollover	Excessive gradient, side travel, soft ground, high attachment position	Fatality, serious injury, major plant damage	ROPS/FOPS; seatbelt; competent operator; slope assessment; attachment kept low where practicable	15	4
MU-010	Operating near edges or drop-offs	Edge collapse / rollover	Soft shoulders, hidden voids, excessive proximity to edge	Fatality, serious injury, plant loss	Safe setback; ground assessment; controlled travel path; spotter where required	15	4
MU-011	Operating on soft or unstable ground	Bogging or loss of stability	Saturated ground, weak fill, hidden holes	Rollover, plant damage, recovery risk	Ground assessment; weather monitoring; approved work paths; competent operator	15	4
MU-012	Vegetation clearing	Falling trees or limbs	Dead/damaged trees, unstable vegetation, poor clearing sequer	Fatality, serious injury, cab damage	Hazardous tree assessment; FOPS; exclusion zones; approved clearing sequence; competent operator	15	4
MU-013	Dense or overgrown vegetation	Hidden rocks, stumps, wire or debris	Hazards obscured by vegetation	Thrown object, plant damage, sudden impact	Slow initial passes; site inspection; known hazards communicated; suitable guarding	15	4
MU-014	Fence wire or metal debris	Entanglement in rotor	Hidden wire, scrap metal or fencing in vegetation	Rotor damage, projectile hazard, sudden stoppage	Inspect work area; remove visible metal/wire; controlled approach; exclusion zone	15	4
MU-015	Working near other mobile plant	Plant-to-plant collision	Multiple machines, blind spots, poor separation	Serious injury, fatality, plant damage	Work sequencing; exclusion zones; radio communication; designated work zones; supervisor coordination	15	4
MU-016	Working near workers on foot	Person struck or hit by debris	Pedestrian enters operating or debris exclusion zone	Fatality or serious injury	Large no-go zone; high-vis PPE; radio/visual communication; operator stops if exclusion zone breached	20	4
MU-017	Operating near overhead powerlines	Electrical contact or arcing	Machine or vegetation contacts powerlines	Electrocution, fire, fatality	Identify powerlines; exclusion distances; spotter where required; work planning	15	4
MU-018	Operating near underground services	Damage to buried services	Ground disturbance, hidden services, root/stump removal	Electrocution, explosion, flooding, service outage	Before You Dig; service plans; marking; controlled work; supervisor oversight	15	4
MU-019	Hydraulic system	High-pressure hydraulic leak or hose failure	Damaged hoses, fittings, poor maintenance	Fluid injection injury, fire, environmental spill	Daily inspection; preventative maintenance; isolation/depressurisation before repair; defect reporting	10	4
MU-020	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; frequent debris cleaning; fire extinguisher where fitted; leak control	20	4
MU-021	Mulching in high fire-risk conditions	Ignition from hot components or metal strike	Dry fuel load, sparks, hot bearings/exhaust	Bushfire, major environmental/property damage	Fire danger monitoring; work restrictions; extinguishers; clean plant; emergency response; stop-work criteria	20	4
MU-022	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
MU-023	Dust and airborne wood particles	Reduced visibility / respiratory exposure	Dry material, fine mulch, wind	Collision, respiratory irritation, nuisance	Enclosed cab where fitted; air filtration; dust suppression where practicable; PPE where required	12	4
MU-024	Noise exposure	High noise levels	Rotor, engine and debris impact	Hearing damage, fatigue	Enclosed cab where fitted; hearing protection where required; maintained equipment	12	4

MU-025	Whole-body vibration	Operator vibration exposure	Rough terrain, prolonged operation, poor seat condition	Fatigue, musculoskeletal discomfort	Maintained suspension seat; controlled speed; breaks and task rotation where practicable	9	4
MU-026	Loading or unloading mulcher for transport	Plant rollover from ramps or trailer	Poor alignment, slippery ramps, unsuitable loading area	Fatality, serious injury, plant damage	Competent operator; level loading area; rated ramps; exclusion zone; spotter where required	15	4
MU-027	Transport restraint	Mulcher movement during transport	Insufficient or damaged chains/restraints	Road crash, plant damage, public injury	Rated restraints; approved tie-down points; pre-departure checks; restraint inspections	15	4
MU-028	Maintenance and repairs	Unexpected movement or stored energy	Inadequate isolation, rotor inertia, hydraulic pressure	Crushing, serious injury, entanglement, fluid injection	Unsafe Plant Isolation Procedure; competent maintenance personnel; rotor fully stopped; isolate/depressurise systems	15	4
MU-029	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
MU-030	Fatigue during prolonged operation	Reduced concentration and reaction time	Long shifts, repetitive work, heat, vibration	Collision, poor judgement, reduced hazard awareness	Fatigue Management Procedure; scheduled breaks; fit-for-work expectations; supervisor monitoring	15	4
MU-031	Environmental disturbance	Unauthorised clearing or habitat damage	Work outside approved limits, poor identification of no-go areas	Environmental harm, client/regulatory action	EMP/SSMP controls; approved clearing limits; fauna/habitat checks; exclusion areas; supervisor oversight	15	4
MU-032	Fauna interaction	Injury to wildlife or operator	Animals concealed in vegetation, nests or habitat trees	Fauna injury, worker injury, environmental breach	Fauna checks; staged clearing; stop-work for wildlife; client/environmental requirements	12	4
MU-033	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
MU-034	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
MU-035	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
MU-036	Manual handling	Hazardous manual tasks	Handling chains, tools, hoses and mulcher 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.