MCK GROUP – HS-RA-001 EXCAVATOR 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; Excavation & Earthworks SWMS; Loading & Unloading Plant & Equipment SWMS; Vegetation Clearing & Mulching SWMS; Hazardous Tree Removal & Chainsaw Operations SWMS; Working in over or adjacent to Water 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
EX-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
EX-002	Operator competency	Untrained or unauthorised operation	Inadequate competency verification or unfamiliarity with machine	Serious injury, rollover, plant damage, poor-quality work	Competency verification; training records; supervision; manufacturer instructions; site induction	15	4
EX-003	Mounting and dismounting excavator	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
EX-004	Starting and moving excavator	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
EX-005	Slewing operations	Person or object struck by counterweight or attachment	Workers or plant within swing radius, blind spots	Crushing, collision, serious injury or fatality	Defined swing radius exclusion zone; communication; spotter where required; controlled slew speed	15	4
EX-006	Reversing / tracking	Striking person, vehicle or object	Restricted visibility, alarms not heard, congestion	Serious injury, fatality, property damage	Reversing alarm; mirrors/cameras; exclusion zones; spotter where required; low speed	15	4
EX-007	Operating on slopes	Excavator rollover	Excessive slope, side travel, soft ground, sudden movement	Fatality, serious injury, major plant damage	ROPS/FOPS; seatbelt; competent operator; slope assessment; attachment kept low while travelling	15	4
EX-008	Operating near excavation edges or drop-offs	Edge collapse / rollover	Undermined edge, soft ground, excessive proximity	Fatality, serious injury, plant loss	Safe setback; ground assessment; controlled positioning; supervisor oversight; spotter where required	15	4
EX-009	Excavation and trenching	Ground collapse / engulfment	Unstable soil, unsupported trench, surcharge loads, water ingress	Serious injury or fatality	Excavation SWMS; battering/benching/shoring where required; spoil setback; inspections; exclusion zones	15	4
EX-010	Excavating near underground services	Service strike	Inaccurate plans, inadequate locating, excavation outside marked area	Electrocution, explosion, flooding, service outage, fatality	Before You Dig; service plans; locating and marking; potholing where required; controlled excavation	15	4
EX-011	Operating near overhead powerlines	Electrical contact or arcing	Boom or attachment entering unsafe clearance	Electrocution, fire, fatality	Identify powerlines; exclusion distances; spotter where required; route and work planning	15	4
EX-012	Lifting loads with excavator	Dropped or swinging load	Incorrect lifting point, overload, poor rigging, side loading	Crushing, fatality, plant damage	Only lift where excavator and lifting point are rated/approved; known load; rated lifting gear; competent persons; exclusion zone	15	4
EX-013	Quick hitch / attachment change	Attachment detachment	Incorrect coupling, locking pin not engaged, damaged quick hitch	Dropped attachment, crush injury, fatality	Approved compatible attachments; visual and physical confirmation of engagement; pre-use check; exclusion zone	15	4
EX-014	Working below raised boom or attachment	Crush from uncontrolled lowering	Hydraulic failure, poor isolation, unsupported attachment	Crushing, serious injury or fatality	Lower attachment to ground before exiting; isolation; approved supports where required; no work under unsupported equipment	15	4
EX-015	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
EX-016	Digging in hard or unknown ground	Bucket or attachment striking hidden object	Buried rock, concrete, stumps or debris	Plant damage, sudden movement, operator injury	Controlled excavation; site inspection; service information; competent operator; reduced speed where uncertain	12	4
EX-017	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 travel paths; supervisor coordination	15	4
EX-018	Working near workers on foot	Person struck or crushed	Pedestrian enters swing radius or blind spot	Fatality or serious injury	No-go zones; high-vis PPE; radio/visual communication; operator stops if person enters exclusion zone	15	4
EX-019	Loading trucks	Bucket contact / falling material	Poor truck positioning, overfilled bucket, truck movement	Crushing, collision, cab damage, injury	Designated loading zone; communication; competent operators; truck stationary where required; controlled bucket movement	15	4
EX-020	Working in or adjacent to waterways	Plant instability / water ingress / environmental harm	Soft banks, rising water, unstable bed, poor access	Rollover, drowning, plant loss, environmental damage	EMP; weather monitoring; approved access; bank assessment; exclusion distances; emergency planning	15	4
EX-021	Vegetation clearing / stump removal	Falling tree, limb or stored tension	Unstable vegetation, dead limbs, roots under tension	Serious injury, fatality, plant damage	Approved clearing method; FOPS; exclusion zones; hazardous tree assessment; competent operator	15	4
EX-022	Forestry and overgrown work areas	Hidden stumps, logs, rocks or holes	Dense vegetation obscures hazards	Sudden impact, rollover, plant damage	Slow inspection passes; work area review; communication of known hazards; suitable guarding	12	4
EX-023	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

EX-024	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
EX-025	Dust-generating earthworks	Dust exposure and reduced visibility	Dry soil, excavation, wind	Respiratory irritation, collision, environmental nuisance	Dust suppression where practicable; enclosed cab; PPE where required; speed control; weather awareness	12	4
EX-026	Noise and vibration exposure	Operator exposure to noise and whole-body vibration	Extended operation, rough ground, poor seat condition	Hearing damage, fatigue, musculoskeletal discomfort	Enclosed cab where fitted; hearing protection where required; maintained seat; breaks where practicable	9	4
EX-027	Loading or unloading excavator for transport	Plant rollover from ramps or trailer	Poor alignment, slippery ramps, inadequate trailer position	Fatality, serious injury, plant damage	Competent operator; level loading area; rated ramps; exclusion zone; spotter where required	15	4
EX-028	Transport restraint	Excavator 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
EX-029	Maintenance and repairs	Unexpected movement or stored energy	Inadequate isolation, raised boom/attachment, hydraulic pressure	Crushing, serious injury, fluid injection	Unsafe Plant Isolation Procedure; competent maintenance personnel; lower attachments; isolate/depressurise systems	15	4
EX-030	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
EX-031	Fatigue during prolonged operation	Reduced concentration and reaction time	Long shifts, repetitive work, heat, travel	Collision, rollover, poor judgement	Fatigue Management Procedure; scheduled breaks; fit-for-work expectations; supervisor monitoring	15	4
EX-032	Environmental disturbance	Erosion, sediment release or work outside approved limits	Excessive ground disturbance, poor spoil placement, inadequate controls	Environmental harm, client/regulatory action, rework	EMP/SSMP controls; approved work boundaries; erosion/sediment controls; supervisor oversight	12	4
EX-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
EX-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
EX-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
EX-036	Manual handling	Hazardous manual tasks	Handling buckets, lifting chains, tools and attachment components; awkward postures	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.