

MCK GROUP – HS-RA-001 CIVIL CONSTRUCTION ACTIVITIES 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 Reporting & Investigation Procedure; OP-PR-017 Unsafe Plant Isolation Procedure; OP-PR-018 Spill Management & Containment Procedure; Working Alone Procedure; Manual Handling Procedure; Fatigue Management Procedure; Gravel Haulage Procedure; Stripping Soil Procedure; Subgrade Preparation Procedure; Subgrade Replacement Procedure; Sub Base Material Procedure; Re-Sheeting Roads Procedure; Road Stabilisation Procedure; Storm Water Drainage Procedure; Sub Soil Drainage Procedure; Sewer Construction Procedure; Build Manholes Procedure; Build Gully Pits Procedure; Operating Mobile Plant SWMS; Excavation & Earthworks SWMS; Loading & Unloading Plant & Equipment SWMS; Vegetation Clearing & Mulching SWMS; Hazardous Tree Removal & Chainsaw Operations SWMS; Relevant Environmental Management Plans (EMP); Site Specific Safety Management Plans (SSMP); MCK Group IMS Registers Master.

Risk ID	Risk Event / Activity	Hazard	Causes	Potential Impacts	Current Controls	Initial Risk	Residual Risk
CC-001	Site mobilisation and establishment	Uncontrolled site access / inadequate site set-up	Work areas not clearly defined, poor signage, incomplete inductions	Injury to workers or public, property damage, disruption to works	Site induction; pre-start briefing; site boundaries identified; access controls; signage; SSMP where applicable	12	4
CC-002	Pre-start planning and daily work coordination	Hazards not identified before work starts	Changing conditions, poor communication, incomplete planning	Serious injury, plant damage, environmental harm, delays	Daily pre-starts; Take 5; SWMS review; supervisor oversight; weather and site-condition checks	12	4
CC-003	Mobile plant operations	Plant and pedestrian interaction	Blind spots, reversing, multiple machines, poor separation	Crushing, collision, serious injury or fatality	Competent operators; exclusion zones; spotters where required; radios; reversing alarms/cameras; high-vis PPE; pre-start planning	15	4
CC-004	Simultaneous operations (SIMOPS)	Conflicting work activities	Multiple contractors, plant movements and work fronts operating together	Collision, struck-by incidents, delays, property damage	Work sequencing; supervisor coordination; pre-start meetings; designated work zones; communication protocols	15	4
CC-005	Traffic and public interface	Interaction with public vehicles, pedestrians or cyclists	Work adjacent to roads, rail trails or public-access areas	Serious injury, collision, public complaint, project disruption	Approved traffic controls; barriers; signage; spotters; authorised closures; TGS where required	15	4
CC-006	Underground services	Contact with underground services	Inadequate service location, inaccurate plans, unplanned excavation	Electrocution, explosion, flooding, service outage, serious injury	Before You Dig enquiries; service plans; locating and marking; potholing where required; excavation controls	15	4
CC-007	Overhead services	Plant contact with overhead powerlines	Booms, raised bodies, cranes or plant operating within unsafe clearances	Electrocution, fire, fatality, equipment damage	Identify overhead services; exclusion zones; height awareness; spotter; route planning; signage	15	4
CC-008	Excavation and trenching	Ground collapse / engulfment	Unstable ground, unsupported sides, surcharge loads, water ingress	Serious injury or fatality	Excavation SWMS; competent supervision; battering/benching/shoring where required; spoil setback; inspections; exclusion zones	15	4
CC-009	Working near excavation edges	Falls of persons or plant into excavation	Unprotected edges, poor visibility, unstable ground, inadequate barriers	Serious injury, rollover, plant damage	Edge protection where required; exclusion zones; stop blocks; lighting; spotter; safe setback distances	15	4
CC-010	Earthworks on slopes or unstable ground	Plant rollover / loss of stability	Steep grades, soft shoulders, hidden voids, wet ground	Fatality, serious injury, major plant damage	Competent operators; suitability assessment; seatbelts; ROPS/FOPS; safe travel paths; weather monitoring	15	4
CC-011	Loading and unloading plant	Plant movement from ramps or trailers	Incorrect loading alignment, ramp failure, poor ground, inadequate restraint	Crushing, rollover, serious injury, equipment damage	Competent operators; level loading area; rated ramps; exclusion zone; spotter; load restraint checks	15	4
CC-012	Plant transport and load restraint	Load shift or loss of plant during transport	Inadequate restraint, worn chains, incorrect tie-down points	Road crash, public injury, plant damage	Rated restraints; approved tie-down points; pre-departure checks; competent drivers; periodic restraint checks	15	4
CC-013	Gravel and material haulage	Heavy vehicle collision or rollover	Speed, fatigue, changing road conditions, poor visibility	Fatality, serious injury, vehicle damage, public risk	Licensed drivers; fatigue controls; route planning; vehicle inspections; speed management; communications	15	4
CC-014	Stripping topsoil	Interaction with mobile plant and uneven ground	Multiple machines, soft ground, obscured hazards	Collision, rollover, injury, environmental damage	Work sequencing; competent operators; exclusion zones; ground assessment; approved work limits	12	4
CC-015	Subgrade preparation	Plant interaction and unstable formation	Soft spots, poor drainage, repeated plant movements	Rollover, collision, poor-quality outcome, rework	Subgrade Preparation Procedure; competent operators; inspection/testing; controlled plant movements	12	4
CC-016	Subgrade replacement	Excavation of unsuitable material	Unstable excavation, services, plant interaction	Serious injury, service strike, rework	Subgrade Replacement Procedure; excavation controls; service identification; controlled replacement process	15	4
CC-017	Placement of sub-base material	Moving plant and material placement	Truck/plant interaction, uneven surface, uncontrolled dumping	Collision, rollover, injury, poor compaction	Sub Base Material Procedure; traffic separation; competent operators; controlled tipping; layer thickness controls	12	4
CC-018	Road re-sheeting	Plant interaction and poor road drainage outcome	Traffic movements, uneven material placement, inadequate crown	Collision, rollover, water ponding, premature road failure	Re-Sheeting Roads Procedure; traffic controls; controlled material placement; grading and compaction; drainage checks	12	4
CC-019	Road stabilisation	Exposure to stabilising agents and mobile plant	Dust, chemical contact, moving spreaders/graders/rollers	Respiratory irritation, burns, collision, environmental harm	Road Stabilisation Procedure; SDS; PPE; exclusion zones; dust suppression; competent operators	12	4
CC-020	Compaction operations	Roller interaction / rollover / vibration exposure	Edges, slopes, reversing, prolonged vibration	Serious injury, rollover, operator discomfort, plant damage	Competent operators; seatbelt; exclusion zones; safe edge distances; daily inspections; work rotation where practicable	15	4
CC-021	Stormwater and drainage construction	Excavation, water ingress and pipe handling	Deep excavations, rain, manual handling, suspended loads	Crushing, falls, musculoskeletal injury, flooding	Storm Water Drainage Procedure; excavation controls; lifting aids; weather monitoring; controlled pipe placement	15	4
CC-022	Subsoil drainage installation	Excavation and manual handling	Narrow trenches, pipe/aggregate handling, unstable sides	Injury, trench collapse, strains	Sub Soil Drainage Procedure; excavation controls; mechanical handling where practicable; safe access	12	4
CC-023	Sewer construction	Excavation, services and biological exposure	Deep trenches, existing services, wastewater contact	Serious injury, infection, service damage	Sewer Construction Procedure; excavation controls; service locating; hygiene/PPE; controlled access	15	4
CC-024	Building manholes	Excavation, lifting and work around openings	Heavy components, open excavations, restricted work area	Crushing, falls, serious injury	Build Manholes Procedure; mechanical lifting; exclusion zones; edge protection; competent personnel	15	4
CC-025	Building gully pits	Excavation and handling precast components	Plant interaction, suspended loads, open pits	Crushing, falls, serious injury	Build Gully Pits Procedure; lifting controls; exclusion zones; excavation controls; spotter	15	4
CC-026	Working in or adjacent to waterways	Sudden water rise / erosion / environmental disturbance	Rainfall, unstable banks, plant movement near water	Drowning, rollover, environmental harm	EMP; weather monitoring; approved access; exclusion distances; erosion/sediment controls; emergency planning	15	4
CC-027	Creek crossings and temporary access	Bank collapse / waterway damage	Inadequate crossing design, wet conditions, repeated heavy plant use	Rollover, environmental harm, access failure	Approved crossing locations; daily inspections; erosion controls; restricted use during adverse conditions	15	4

CC-028	Vegetation clearing and mulching	Falling vegetation / flying debris / plant interaction	Dense vegetation, hidden objects, unstable trees, public access	Serious injury, plant damage, environmental harm	Approved clearing limits; exclusion zones; competent operators; FOPS; fauna checks; environmental controls	15	4
CC-029	Hazardous tree removal and chainsaw operations	Falling trees, limbs and chainsaw contact	Dead/damaged trees, unpredictable fall direction, operator error	Fatality or serious injury	Hazardous Tree Removal SWMS; competent chainsaw operators; exclusion zones; planned fall direction; PPE; spotter	15	4
CC-030	Manual handling during civil works	Musculoskeletal strain or crush injury	Lifting pipes, tools, barriers, materials; awkward postures	Sprains, strains, lost time injury	Mechanical aids; team lifts; Manual Handling Procedure; task planning; training	9	4
CC-031	Remote and isolated work	Delayed emergency response / communication failure	Remote forestry and park locations, mobile blackspots	Serious injury escalation, delayed rescue	Working Alone Procedure; communication plans; check-ins; emergency contacts; location information; first aid resources	10	4
CC-032	Fatigue and extended work periods	Reduced alertness and decision-making	Long shifts, travel, early starts, heat, repetitive work	Collision, operating error, serious injury	Fatigue Management Procedure; work/rest planning; supervisor monitoring; fit-for-work expectations	15	4
CC-033	Extreme weather and heat	Heat stress, lightning, heavy rain or poor visibility	Queensland climate, remote work, storms, high temperatures	Illness, collision, flooding, environmental impact	Weather monitoring; hydration; rest breaks; work suspension criteria; emergency planning	12	4
CC-034	Refuelling and field maintenance	Fuel or oil spill / fire	Damaged hoses, overfilling, hot surfaces, poor handling	Environmental contamination, fire, injury	Spill Management Procedure; spill kits; trained personnel; no ignition sources; inspections; controlled refuelling	12	4
CC-035	Cultural heritage and unexpected finds	Disturbance of cultural heritage material	Unidentified sites, excavation outside approved limits	Heritage damage, regulatory/client action, work stoppage	Approved work boundaries; EMP requirements; stop-work and notification process; worker awareness	8	2
CC-036	Quality control and completion of civil works	Work not meeting specification	Poor materials, inadequate compaction, incorrect levels, insufficient inspection	Rework, client dissatisfaction, premature asset failure, financial loss	Approved procedures; QA checks; inspections; testing; supervisor verification; client specifications	12	4
CC-037	Noise Exposure	Excessive occupational noise	Prolonged operation of heavy plant, trucks, cutting, grinding, compacting and other high-noise activities	Hearing damage, reduced communication and increased risk of incidents	Select quieter plant/equipment where reasonably practicable; maintain plant and equipment; separate workers from noise sources where practicable; limit exposure; hearing protection where required; ensure communication methods remain effective	12	4
CC-038	Psychosocial	Psychosocial hazards associated with the task	High workloads, time pressure, fatigue, changing site conditions, poor communication and multiple work fronts.	Stress, reduced concentration, poor decision making, psychological injury and increased incident risk.	Worker consultation; work planning and supervision; Fatigue Management Procedure; regular breaks; effective communication; reporting pathways.	12	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.