

MCK GROUP – HS-RA-001 GRADER 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
GR-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
GR-002	Operator competency	Untrained or unauthorised operation	Inadequate competency verification or unfamiliarity with grader controls	Serious injury, collision, plant damage, poor-quality work	Competency verification; training records; supervision; manufacturer instructions; site induction	15	4
GR-003	Mounting and dismounting grader	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
GR-004	Starting and moving grader	Collision with people or plant	Blind spots, long machine length, poor communication	Crushing, collision, serious injury or fatality	Exclusion zones; competent operator; horn; mirrors/cameras where fitted; radios; pre-start communication	15	4
GR-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
GR-006	Operating on slopes	Grader rollover	Excessive gradient, side travel, unstable ground, articulated steering position	Fatality, serious injury, major plant damage	ROPS; seatbelt; competent operator; slope assessment; manufacturer limits; controlled steering/articulation	15	4
GR-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; controlled travel path; spotter where required	15	4
GR-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 travel paths; competent operator	15	4
GR-009	Blade operation	Striking people, plant or objects with blade	Poor visibility, incorrect blade position, tight work area	Serious injury, collision, equipment damage	Exclusion zones; competent operator; controlled blade positioning; communication; spotter where required	15	4
GR-010	Working around articulation point	Crush / pinch point	Person enters articulation area during movement or maintenance	Crushing, serious injury or fatality	Exclusion from articulation zone; plant stopped and isolated before inspection; warning decals	15	4
GR-011	Grading road formation	Interaction with other mobile plant	Multiple machines operating in same work area	Collision, serious injury, plant damage	Work sequencing; radio communication; separation distances; designated travel paths; supervisor coordination	15	4
GR-012	Working near workers on foot	Person struck or crushed	Pedestrian enters grader operating area 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
GR-013	Operating near traffic or public access	Vehicle/public interaction	Road works, shared access, poor separation	Collision, serious injury, public complaint	Traffic controls; barriers; signage; spotters; approved closures/TGS where required	15	4
GR-014	Working near underground services	Damage to buried services	Blade or scarifier penetrates service zone	Electrocution, explosion, flooding, service outage	Before You Dig; service plans; marking; controlled grading/scarifying; supervisor oversight	15	4
GR-015	Operating near overhead powerlines	Electrical contact or arcing	Machine or accessories entering unsafe clearance	Electrocution, fire, fatality	Identify services; exclusion distances; signage; route planning	10	4
GR-016	Scarifier/ripper operation	Unexpected impact or component failure	Buried rock, concrete, roots or other obstruction	Plant damage, sudden machine movement, operator injury	Controlled speed; work area inspection; competent operator; exclusion zone	12	4
GR-017	Grading loose material	Flying debris / material displacement	Blade contacts rocks or debris, excessive speed	Struck-by injury, vehicle damage, public hazard	Controlled speed; exclusion zone; inspect work area; maintain safe separation from public/traffic	12	4
GR-018	Dust-generating grading	Dust exposure and reduced visibility	Dry road material, wind, repeated passes	Respiratory irritation, collision, environmental nuisance	Dust suppression where practicable; enclosed cab; PPE where required; speed control; weather awareness	12	4
GR-019	Road crown and drainage formation	Poor drainage or unstable finished surface	Incorrect blade settings, insufficient fall, poor material control	Water ponding, erosion, road failure, rework	Approved procedures/specifications; competent operator; level/fall checks; supervisor inspection	12	4
GR-020	Working in wet weather	Reduced traction / visibility	Rain, slippery surface, waterlogged ground	Loss of control, bogging, poor-quality work	Weather monitoring; reduced speed; ground assessment; stop-work criteria	12	4
GR-021	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
GR-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
GR-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
GR-024	Noise and vibration exposure	Operator exposure to noise and whole-body vibration	Extended operation, rough formation, poor seat condition	Hearing damage, fatigue, musculoskeletal discomfort	Enclosed cab where fitted; hearing protection where required; maintained seat; breaks where practicable	9	4
GR-025	Loading or unloading grader 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
GR-026	Transport restraint	Grader 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

GR-027	Maintenance and repairs	Unexpected movement or stored energy	Inadequate isolation, hydraulic pressure, articulation movement	Crushing, serious injury, fluid injection	Unsafe Plant Isolation Procedure; competent maintenance personnel; isolate and secure plant; depressurise systems	15	4
GR-028	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
GR-029	Fatigue during prolonged operation	Reduced concentration and reaction time	Long shifts, repetitive grading, heat, travel	Collision, rollover, poor judgement	Fatigue Management Procedure; scheduled breaks; fit-for-work expectations; supervisor monitoring	15	4
GR-030	Environmental disturbance	Dust, erosion or work outside approved limits	Excessive grading, poor drainage, disturbed shoulders	Environmental harm, client/regulatory action, rework	EMP/SSMP controls; approved work boundaries; erosion controls; supervisor oversight	12	4
GR-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
GR-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
GR-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

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.