

Risk Assessment – Thwaites 3T Swivel Tip Dumper

Equipment Details

Equipment: Thwaites 3T Swivel Tip Dumper

Model: Mach 2077

Maximum Payload: 3000 kg

Typical Use: Transporting and dumping soil, aggregates, rubble and construction materials on construction sites.

Relevant Standards / Guidance

WHS Act & WHS Regulations (Australia)

Safe Work Australia – Managing Risks of Plant in the Workplace

AS 4024 Safety of Machinery series

Manufacturer's Operating Manual – Thwaites Dumpers

Control Measures

Engineering: ROPS, seat belt, reversing alarm, parking brake, hydraulic safety systems.

Administrative: trained operators, pre-start inspections, traffic management plans, defined travel routes.

PPE: safety helmet, high-visibility clothing, safety boots, gloves, hearing protection if required.

Emergency Procedures

Machine rollover: remain seated with seatbelt fastened and hold steering wheel.

Fire: stop engine immediately and use extinguisher if safe.

Mechanical failure: stop machine safely, isolate equipment and report.

Hazard Identification and Risk Assessment					
Task	Hazard	Potential Consequence	Initial Risk	Control Measures	Residual Risk
Transporting Materials	Overloading Dumper	Loss of Control, Tip-Over	High	Do Not Exceed 3000kg Payload; Trained Operator	Medium
Travelling Uneven Terrain	Vehicle Rollover	Crush Injury or Fatality	Extreme	Avoid Steep Slopes; Maintain Safe Speed	High
Turning With a Raised Load	Loss of Stability	Rollover	High	Keep Bucket Lowered	Medium
Reversing	Striking Pedestrians	Serious Injury	High	Reversing Alarm; Exclusion Zones; Spotter	Medium
Dumping Material	Material Spillage	Struck-By Injuries	Medium	Ensure Stable Ground Before Tipping	Low