



VUL-SWP-076(5)-Grader Operations

SAFE WORK PROCEDURE (SWP)			
Description	Grader Operations		
Site	Vulcan Mine		
Department	Operations		
PPE Required		Workplace Risk Assessment & Control Reference	
 Safety helmets must be worn in this area  Ear protection must be worn  Protective footwear must be worn  Protective gloves must be worn  High visibility clothing must be worn in this area  Eye protection must be worn		VUL-SWP-076(5) WRAC	
VUL SOP / PRO Reference		Other Relevant Information	
VUL-SOP-073-Checking Mobile Plant VUL-SOP-076-Using Mobile Plant VUL-SOP-065-Personal Protective Equipment VUL-SOP-129-Maintain & Water haul roads VUL-MOP-128-Design & Construction of Mine Roads VUL-SOP-144-Lighting VUL-TAR-003-Geotechnical Failure Recognised Standard 19		☒ Relevant OEM instructions & specification available	
		☒ Pre-start Meeting	
		☒ OCE Report	
People, Equipment, Materials and Tools Required			
People	Equipment	Materials	Tools
Operator	Grader	NA	NA
Operators	Other Circuit Equipment	NA	NA



Prestart Information	
Grader operators must obtain the following information from the prestart meeting: a) Active circuits b) High interaction areas c) Any other information relating to the task	
Positive communication and Over-taking	
a) Grader operators are to ensure other equipment operators working in the grading area is aware of the task taking place. b) All vehicles and plant over-taking graders must first establish positive communication with the grader operator, reduce speeds to 30km/h, have clear vision on a straight section of road and maintain at least 5m distance from the grader. The grader operator may also direct the traffic to either side of the grader if there are hazards ahead. c) Over-taking graders is only permitted when ground tools are engaged (working grader) or the grader is completely stopped.	
Commence grading	
a) Grading against flow of traffic is only allowed where there is a long straight section of road and clear visibility exists. Where operating in areas of restricted visibility i.e. blind corners, ramp crest, intersections, areas separated by centre bunds or other areas of restricted visibility. Controls such as blocking the road or restricting with signage and positive communication to circuit users must be applied. b) Maximise the effectiveness by carrying sufficient material in the blade to allow for cut and fill of high and low spots. c) Use ripper to rip hard packed surfaces and rip only in 1st or 2nd gear.	



Grading operations	
a) Grading haul roads should maintain the minimum required running surface only. Grader should clear over-size material away from the shoulders of running surfaces to prevent tyre damage. b) To maintain the required running surface width, all rills should be redistributed across the running surface or cut past the designated running surface. c) All cambers and drainage should be maintained to haul road design specifications d) Keep drainage channels and base of bunds clear of any excess material. e) Leave bunds face angles as steep as possible. f) Ensure excess material does not build up at the base of the bund (potentially creating a ramp) especially after wet weather event g) Road surfaces that appear to have a smooth shiny surface and water cannot penetrate, should be ripped and graded to improve traction for other rubbered tired equipment. h) If visibility is restricted due to airborne dust, grading operations shall be minimised. i) During operations the operator shall monitor GETs for excessive wear or damage.	  
Completion of grading operations	
a) Continue pulling material in from the side of the haul road to maintain the required width of the running surface. b) Do not leave grader rills across access roads or across light vehicle roads. c) If the grader must leave a job not completed, report the hazard to other circuit users and supervisor as soon as possible.	