

Appendix I – Comparison of the MMU Plans for the Longwall Panels

Methane and Dust Control Plan Requirement for Longwall		MMU 031-0 (Approved May 18, 2006)	MMU 050-0 (Approved June 15, 2009)
Shearer	Make and Model	Joy 7LS	Joy 7LS
	Type spray system	Spray System Co. – Veejet Conflow or equivalent	Pressure Spray Nozzle – <u>Not</u> specified
	Number of sprays	114	109
	Pressure at spray block	60 p.s.i.	90 p.s.i.
Stage Loader	Scrubber system	Operated continuously w/ stage loader	<u>Not</u> required
	Number of sprays (per “Headgate Layout”)	24	14
	Spray bars	Two (one w/6 sprays and one w/3 sprays)	Two (each w/3 sprays)
	Pressure at spray bar	60 psi	60 psi
	Spray operation	Continuous while face chain conveyor operating	<u>Not</u> required
Face Chain Conveyor	Water sprays	#3 cone spray every fifth shield (shield #8 through #168) - operated continuously when mining	<u>Not</u> required
	Spray pressure	60 p.s.i.	<u>Not</u> required
Shields	Water Sprays	Each shield equipped w/ water spray to be activated when shield lowered	<u>Not</u> required
	In adverse conditions (18” or more of rock)	Two top sprays on shields 5, 7, 10, 25, 45, 65, 85, and 105 - operated continuously during mining	Two sprays on canopy tips every 20 shields - manually activated to control dust during mining
	Infrared spray system	Activated minimum of two shield sprays in advance of shearer’s cutting path	<u>Not</u> required
Cleaning Procedures		When shearer operating, persons with wash down hoses (located upwind of headgate shearer drum) cleaning face equipment. No one allowed within 6 shields of cleaning process	Shields will be washed weekly to prevent accumulation of dust. No one allowed within 6 shields during cleaning process
Face Ventilation	Intake air (quantity)	104,000 cfm	40,000 cfm
	Check curtain	Maintained between #4 shield and the rib to deflect intake air to face	Maintained as shown on diagram “Headgate Layout”
	Headgate (velocity)	750 fpm at #17 shield	400 fpm at #9 shield
	Mid-face (velocity)	575 fpm at #88 shield	<u>Not</u> required
	Tailgate (velocity)	550 fpm at #160 shield	250 fpm at #160 shield
Location of Persons	During cutting operations	No persons inby or downwind of the headgate side shearer drum	No persons inby or downwind of shearer carriage
	Short-term Exception - Correcting Hazard; making exam or repair	Must wear Racal air-purifying helmet or other equivalent air induced respirators	Limited to 30 minutes with use of approved respirator
	While advancing shields	All persons upwind of moving shields	<u>Not</u> required
Respiratory Protection		All face workers (head and tail shearer operators and jack setters) must wear Racal air-purifying helmet or other equivalent air induced respirators	All persons working at face will be offered the use of Air Stream helmets
Personnel Training		Refresher training discussed prior to every shift concerning respirable dust parameters of plan and recorded in fireboss book	<u>Not</u> required
Dust Control Parameter Checks		Additional check at mid-point of each production shift	Additional check <u>not</u> required