

JWA PARTICIPATES IN BHP'S 2020 FATALITY REDUCTION PROGRAM

JWA has entered two submissions to BHP's 2020 safety initiative aimed at reducing workforce risks and eliminating mining fatalities across its global operations.

Mining giant BHP has partnered with Australia's leading mining equipment and technology body, Austmine, to launch a program inviting suppliers to develop innovative solutions to top ten safety risks faced by the miner, such as safety of vehicles and mobile equipment operating in pit or underground, fire and explosion, falling objects or electrical hazards.

The submissions put forward by JWA aims to reduce traffic-related accidents in underground coal mines as well as provide stable ground access for haul roads, which are prone to accidents as erosion or soft ground conditions after heavy rains increase the likelihood of slippage, rollover or bogging of heavy machinery.

NAVIGATING IN UNDERGROUND COAL SHAFTS

Studies conducted by the Australian Coal Industry's Research Program (ACARP), show that shuttle car movements in underground development roads is the leading cause of injuries and fatalities in underground coal mining, from potholes created from constant heavy-machinery traffic.

Moreover, the use of water sprays to control coal mine dust also results in the roadways becoming a slurry mix of coal, clay and water overtime.

The combination of soft floor conditions with pothole-riddled roads is a hazard for shuttle cars with 4-wheel steering, which increases the risk of the cars skidding and causing crush injuries.

JWA's DURA-BASE Composite Matting, which has been utilised for load spreading applications of over 3,200 tons, offers a ready solution to this commonplace hazard. DURA-BASE's 105mm thick HDPE modular panels interconnect to form a solid surface to drive on, immediately improving road conditions to ensure workplace safety.

Crucially, without the need for frequent pothole repairs required of concrete roads, combined with more efficient travel times by the shutter cars, the use of DURA-BASE mats can increase a mine's production efficiency by six percent.¹

The second pitch submitted by JWA offered a solution to ensure stable ground access for haul roads and heavy lift areas at mine sites.

HAUL ROADS - LIFELINE OF MINES

Haul roads are the lifeline of all open pit mines and having a smooth and durable road profile is key to keeping productivity at an optimum. Having good roads are also key to increasing tyre-life of haulage machinery.

JWA's DURA-BASE matting provides a solid continuous stable surface that, unlike the current practice of using crushed rocks, is not subject to erosion and degradation due to use or heavy rainfalls, thus eliminating the need for frequent maintenance.

Importantly, matting effectively reduces the risk of loss of vehicle control and accident. Having a solid and durable roadway mitigates against serious incidents occurring due to vehicles encountering unexpected soft-sections of road, potholes and lack of visibility due to dust.

The current practice of using crushed rocks require frequent repairs due to potholes, ruts or depressions that form because of damage from tracked machines, wheel rutting, spillage of material from trucks or most commonly, heavy rainfall turning the road into mud or flooding of the pavement.

Crushed rocks and fill material also lead to excessive dust being kicked up in the air by moving vehicles, which is a safety issue due to visibility hazard. Dust also puts stress on machinery by clogging air filters, brakes and other moving parts.

Unfortunately, the practice of watering haul roads to control dust has created its own problems, such as roads becoming too slippery, paving the way for road degradation and loss of traction for mine vehicles.

"It is absolutely crucial that every worker has the safest working environment possible and we look forward to working with the mining majors to minimise traffic hazards in the industry," said Hensley Wee, JWA's Business Development Manager.

ABOUT JWA JWA is an Australian company committed to providing innovative and environmentally sustainable solutions to the resources and industrial sectors. Our company has supported major energy and infrastructure projects across the country, including the construction of LNG projects, road and rail programs and renewable developments.

For more details on the use of DURA-BASE mats in underground coal mines, click on:<https://www.jwaoil.com/news/eliminating-hazards-in-underground-coal-mine-devel>

For more on BHP's 2020 Fatality Elimination Program, visit:<http://www.austmine.com.au/Next-Steps-Towards-Fatality-Elimination>

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