

## RASP MINE, BROKEN HILL

## Summary of Modifications to Rasp Mine Project Approval 07\_0018

MOD	Mine Life	Mining Rate and Total Production	Mining Methods	Waste Rock Management	Processing Rate	Processing Methods	Concentrate Production	Tailings Disposal	Water Supply	Employment Numbers	Other	Key Changes to Approved Rasp Mine Environment Impacts
EA	15 years from 2011 to 2026	750,000 tpa Total production over life of Project: 8,450,000 t	Underground mining using various methods including long hole, benching, modified Avoca, room and pillar or uphole retreat.	Underground: Backfill Surface: Inert material to be used for road repair and bunding and rehabilitation at closure. Permitted storage in Kintore Pit and BHP Pit.	250 tph crushing plant 93.8 tph grinding plant	Crushing, grinding, flotation, thickening and filtration at on-site processing facilities.	Lead: 44,000 tpa (concentrate 73% Pb and 985 g/t Ag) Zinc: 87,000 tpa (concentrate 50% Zn)	Fine tailings disposal (approximately 320,000 tpa):- - TSF1 (10 m raise), and - TSF2 Blackwood Pit Coarse tailings disposal (approximately 320,000 tpa) as underground stope back fill.	Potable 9 ML/a Raw 139 ML/a Reclaimed /Recycled 300 ML/a Extraction up to 370 ML/a	143	-	-
PPR	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	Relocation of processing plant with concentrate trucked to new Rail Loadout, Removed secondary and tertiary crushers and screens from the crushing circuit.	No change to overall air quality as decrease in crushing is off-set by increase in trucking (of concentrate). However less receptors impacted as new location is further away from residents.
MOD1	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	Relocation of ventilation shaft and installation of ventilation fans U/G.	Some increase in NOX exposure as new location closure to residents, criteria met.
MOD2	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	Allow crusher to be operated at any time (24 hours per day 7 days per week).	Increase to night noise however all criteria met.
MOD3	No change Replacement tonnes.	No change Replacement tonnes.	No change	No change	No change	No change	No change	No change	No change	No change	Extension of underground mining to include Block 7 (also included the Zinc Lodes).	Increase in vibration to residents. Increase in noise from intake vent shaft.
MOD4	No Change	No Change	No change	Material <0.5% Pb used in TSF2 embankment construction	No change	No change	No change	No change	No change	195 (updated 2 additional related to MOD4)	Cement silo, Concrete Batching Plant,	For construction - Increase in noise to some residents. - Minor increase to air quality however no HHRA required as impact not



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												material. For operations - Visual amenity impacted, consistent with mining landform.
MOD5											Cement silo, and warehouse extension.	No future impacts.
MOD7	No change	No change	No change	Material <0.5% Pb used in TSF2 embankment construction	No change	No change	No change	No change	No change	No change	Mobile crushing in BHP Pit for embankment construction	Increase in air emissions offset by decrease in distance for trucking material.
MOD8	No change	No change. Tonnes swap with Perilya.	No change	No change	No change	No change	No change	No change	No change	No change	U/G mining extension (20x250m) across Perilya Lease ML1249.	No future impacts.
MOD6 (propos ed)	No change	500,000tpa No change in total production to 2026.	No change	Co-placed with tailings in TSF3. Used for rehabilitation capping. Boxcut waste permanently stored in Little Kintore Pit and BHP Pit.	No change	No change	No change	Disposal in TSF3 Kintore Pit. Utilisation of the surface of TSF2 to naturally dry tailings which would be harvested and transferred to TSF3.	Potable water 10 ML/a. Raw water 324 ML/a. Reclaim water 525 ML/a. No change in extraction.	192 (adjusted currently 186 workforce plus 6 new employees for MOD6 operations).	Establish Kintore Pit as TSF3. Relocate mine portal and decline to a new boxcut. Utilise TSF2 for tailings harvesting. Periodic crushing of non-ore material in Kintore and BHP Pits. Utilise waste rock (<0.5% Lead) for rehabilitation capping. Amendments for site noise criteria and annual environmental reporting.	For construction - Increase to noise and air quality impacts for short duration. - Vibration and overpressure impacts from surface blasting for short duration. For operations - Increase to noise impacts primarily due to tailings haulage, noise criteria met. - All air quality metrics, including Pb, are less than the emissions estimated in the EA. - No expected increase to BPb levels.