

# Appendix C

Updated project description







## C.1 Updated description of the modified project

Table C.1 includes a consolidated description of the modified project.

### Table C.1Updated project description

Development Component	Description
Tenement	No change to mining tenements.
	Mining activities are approved to be ML 1535 and ML 1791.
Life of mine	Extension of mine life from 2032 to the end of 2040, to align with the operations of the proposed underground mine development and its ore processing requirements.
Gold production	Production of a further 1.8 Moz of gold (approximate), totalling 7.9 Moz over the life of the CGO.
Open-cut pit design	No change to the open-cut pit-design.
	Development of the open-cut pit is staged as it is progressively deepened and widened.
	The total open-cut pit area is approximately 131 ha and its final depth will be approximately - 331 mAHD.
Ore production	No change to total ore production.
	Approximately 167 Mt of ore will be produced over the life of the CGO from the open-cut pit.
On-site ore transportation	No change to ore transportation methods.
	Underground ore will also be trucked from the underground run-of-mine stockpile in the vicinity of the box-cut to the temporary ore stockpile.
Ore processing	No change to ore processing rate, which is undertaken at the ore processing facility at a rate up to 9.8 Mtpa.
	A secondary ore crushing circuit within existing process plant is approved to be constructed.
	The existing processing facility will be modified to include:
	<ul> <li>a tailings desliming circuit;</li> </ul>
	<ul> <li>an ore receival bin and mill feed conveyor; and</li> </ul>
	an upgraded elution circuit.
Cyanide use	No change to cyanide circuit.
	Use of a primary ore conventional carbon-in-leach circuit, which includes recovery of gold from flotation tailings.
Cyanide concentration levels	No change to cyanide concentration levels.
	The use of cyanide is undertaken in accordance with the approved Cyanide Management Plan (CMP).
	<ul> <li>Cyanide concentrations in the aqueous component of the tailings slurry stream at the process plant not to exceed the following:</li> </ul>
	<ul> <li>20 milligrams per litre (mg/L) weak acid dissociable cyanide (CN<sub>WAD</sub>) (90<sup>th</sup> percentile over 6 months); and</li> </ul>
	<ul> <li>30 mg/L CN<sub>WAD</sub> (maximum permissible limit at any time).</li> </ul>
Mineralised material processing	No change to mineralized material processing.
	CGO is approved to process approximately 39.3 Mt of mineralised material.

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Water supply sources	No change to water supply sources.
	Water on site is captured and used for ore processing and dust suppression. Water is preferentially sourced from internal sources, and supplemented with water from external sources as follows:
	Internal sources
	<ul> <li>recycled water from the TSF/IWL;</li> </ul>
	<ul> <li>open-cut pit sump and pit dewatering borefield;</li> </ul>
	<ul> <li>rainfall runoff from mine waste rock emplacements, and other areas within the site which is collected as part of the Internal Catchment Drainage System (ICDS) and contained in nine on-site water storages; and</li> </ul>
	<ul> <li>approved D10 dam (yet to be constructed).</li> </ul>
	External sources
	<ul> <li>saline groundwater from four production bores located south-east of ML 1535;</li> </ul>
	• Eastern Saline Borefield located approximately 10 km east of Lake Cowal's eastern shoreline;
	<ul> <li>Bland Creek Palaeochannel Borefield which comprises four production bores within the Bland Creek Palaeochannel, located approximately 20 km northeast of the CGO; and</li> </ul>
	water accessed from the Lachlan River under licence, which is supplied via a pipeline from the Jemalong Irrigation Channel.
Bland Creek Palaeochannel	No change to operation of the borefield or approved extraction limits.
Borefield operation and	The maximum extraction of water from the Bland Creek Palaeochannel must not exceed:
extraction limits	• 15 ML per day; or
	• 3,650 ML per annum.
	Extraction is managed to maintain groundwater levels above the established DoI (Water) trigger levels.
Site water management infrastructure	No change to UCDS and ICDS.
	Construction of a pipeline from the tailings deslimer to the paste fill plant to send tailings to the paste fill plant and a return water pipeline from the paste fill plant to the processing facility.
	Augmentation of dam D5A to allow the ore receival hopper and ore feed mill conveyor to be developed. This augmentation will not change the overall catchment area of the dam.
	Augmentation of other on-site water storages from time to time depending on water supply and on site requirements.
Waste rock management	There are no changes to the emplacement of waste rock. Mined waste rock is emplaced in the northern, southern and perimeter waste rock emplacements over the life of the CGO, and it is used to form the perimeter of the IWL.
	• Approximately 5.74 Mt of additional waste rock would be managed from the underground mine over the life of the underground mine.
	<ul> <li>There are no changes to the height of the northern, southern and perimeter waste rock emplacement areas.</li> </ul>
Mineralised material stockpiling	No change to temporary stockpiling of mineralised material.
	Temporary stockpiling of mineralized material on the northern waste rock emplacement to a maximum design height of approximately 320 mAHD. This material will be processed and the stockpile will be progressively removed.
Soil management	No change to soil management.
	Application of soil resources management strategies/objectives in accordance with the existing Erosion and Sediment Control Management Plan (ESCMP).

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Soil stockpiles	No change to soil stockpiling.
	Development of soil stockpiles within ML 1535 and MLA 561.
Tailings storage	A height increase of one vertical metre, from 245 mAHD to 246 mAHD to the final rehabilitated height of the IWL, as a result of emplacing the residual tailings from the processing of the underground ore.
Mining fleet	No change to open-cut mining fleet.
	The existing mobile equipment fleet used for open pit ore extraction, waste rock handling, TSF lifts and rockfill buttress construction includes: excavators; haul trucks; dozers; loaders; water trucks; articulated dump trucks; compactors; rollers; scrapers; graders; and drill rigs.
Biodiversity Offset Strategy	No change to biodiversity offset strategy.
	The Biodiversity Offset Strategy is shown conceptually in Appendix 4 of Development Consent DA 14/98, and generally involves securing six offset sites.
Power Supply	No change to power supply arrangements.
	Electricity to the site is supplied via a 132 kV electricity transmission line from Temora, approximately 90 km south of the CGO.
Site access road	No change.
	Site access road following existing roads from West Wyalong to the CGO. Light vehicle access from Condobolin and Forbes.
Ancillary surface	Operation of a mine infrastructure area.
infrastructure	Development of additional surface infrastructure and augmentation of existing infrastructure, all within the existing approved disturbance areas, including (but not limited to): administration facilities, offices and car parking, warehouses and stores, vehicle washdown facilities, heavy vehicle and light vehicle maintenance workshop and maintenance bays, control room, fuel farm, core yards and drill sheds, hard stands and go lines, ablutions and changerooms, communications infrastructure, access roads, water storages and other minor ancillary infrastructure.
Exploration	Continuation of exploration activities within ML1535.
Hours of operation	No change to hours of operation.
	Mining operations and ore processing are approved to be undertaken 24 hours a day, seven days a week.
	Construction activities, including activities at the IWL are approved to be undertaken only during standard construction hours.
Employment	No change to the open-cut pit workforce.
	During peak periods, the CGO employs up to 500 people.
	A peak construction workforce of up to approximately 150 people on-site at any one time for the construction of the proposed paste fill plant and other surface infrastructure.