

EPA Chair delegation

Summary of reasons for decision – Amendment of an approved proposal under section 45C of the *Environmental Protection Act 1986*

Ministerial Statement:	1128
Proposal Title	St Ives Gold Mine – Beyond 2018 Project (Revised Proposal)
Approved Proposal:	Proposal to expand existing mining operations by increasing the land and lake based mining activity on Lake Lefroy and on adjacent land, approximately 20 kilometres (km) south east of Kambalda in the Goldfields region of Western Australia. The proposal includes the discharge of dewatering to the lake’s surface and the construction of associated mine infrastructure, including open pits, underground operations, waste rock dumps and tailings storage facilities, the subject of Statement No. 879 dated 16 November 2011.
Proponent:	St Ives Gold Mining Company Pty Limited (Australian Company Number 098 386 273)
Environment Online Reference Number:	APP-0000196
Date Ministerial Statement first issued	18 March 2020
Dates of any approved changes to Approved Proposal	N/A
Date of proponent’s request to amend	21 December 2022
Date additional information received	10 November 2023
Date application made public or public comment sought on application	N/A
Description of requested amendments to approved proposal	<p>St Ives Gold Mining Company Pty Limited will construct a hybrid energy-source powered microgrid at the St Ives Gold Mine site.</p> <p>The hybrid microgrid will consist of a wind farm comprising up to 10 wind turbine generators, a solar farm, thermal generation plant, battery energy storage system, new substation and associated transmission, power conditioning and supporting infrastructure. Supporting infrastructure includes elements such as access tracks and roads, a control room, operations and maintenance facilities and construction works such as crane pads.</p>

	The area of the existing Development Envelope approved under Ministerial Statement 1128 will be increased by 572 hectares (ha).
Decision	The requested amendments to the Approved Proposal are not considered to be significant amendments. The amendments to the Approved Proposal are approved.

Environmental factors relevant to amendments:

- Terrestrial Fauna.
- Flora and Vegetation.
- Social Surroundings.

Summary of review of whether an amendment should be approved under section 45c(1)	
Environmental Factor review	<p>Terrestrial Fauna: The total area of clearing for the amended proposal will not exceed the 5,085 ha as previously approved under Ministerial Statement 1128. Furthermore, an area containing a high number of inactive Malleefowl mounds was excluded from the amended development envelope. Existing requirements under condition six of Ministerial Statement 1128 will continue to require the proponent to detect and avoid active Malleefowl mounds and direct impacts to Malleefowl.</p> <p>A number of bird and bat species may be directly impacted by the wind turbines, from collision or air decompression. However, the risk to all species that may occur in the area is considered low at both the local and regional level.</p> <p>Indirect impacts are limited. Potential impacts to terrestrial fauna are expected to be comparable to those of the approved proposal.</p>
	<p>Flora and vegetation: Flora and vegetation surveys within the development envelope did not record any species or communities of significance. The total area of native vegetation to be cleared is unchanged from the approved proposal and existing controls are in place to minimise indirect impacts. Potential impacts to flora and vegetation are expected to be comparable to those of the approved proposal.</p>
	<p>Social surroundings: The disturbance footprint has been designed to avoid all potential Aboriginal heritage sites and measures are in place to ensure they are not inadvertently impacted.</p> <p>Impacts to visual amenity are considered low as the wind farm will be approximately 16 kilometres from the Red Hill viewing area and 18 km from the closest residence. Additionally, considering the distance, material impacts from noise and dust on the town of Kambalda are highly unlikely.</p> <p>Potential impacts to social surroundings are expected to be comparable to those of the approved proposal.</p>

<p>Controls on implementation for amendment</p>	<p>Consistent with condition six of Ministerial Statement 1128, the proponent will continue to require avoiding direct impacts to Malleefowl and active mounds. The measures in the approved Terrestrial Fauna Environmental Management Plan are considered to be applicable to manage potential impacts to Malleefowl from construction and operation of the hybrid microgrid.</p>
<p>Significance of requested amendment</p>	<p>The proposed amendments are not likely to have a significant effect, on their own or in the context of the existing approved proposal, on the environment.</p>

Summary of consideration of amendment

The decision-maker has considered whether the proposed amendment would be a significant amendment in addition to the potential impacts of the amendments.

EPA Services has considered:

- the cumulative environmental impacts
- holistic impacts
- whether the environmental effects of the implementation of the proposal as amended will be consistent with the EPA’s environmental factor objectives
- whether the proposal as amended would still be substantially the same character as the approved proposal.

Summary of decision

The decision-maker has considered the request to amend an approved proposal under section 45C(1) of the EP Act. The decision-maker considers the requested amendments to the Approved Proposal are not considered to be significant amendments.

Attachments:

- Amended Proposal content document
- Figure 1 Revised development envelope
- Figure 2 Indicative footprint and changes to development envelope

Appeals: Decision not appealable.

Professor Matthew Tonts

CHAIR

Delegate of the Environmental Protection Authority

Date: 18 December 2023

Proposal Content Document

Table 1 General proposal content description

Proposal title	St Ives Gold Mine: The Beyond 2018 Project
Proponent name	St Ives Gold Mining Company Pty Limited (SIGMC)
Short description	<p>The St Ives Gold Mining Company Pty Ltd (SIGMC) currently consists of land and lake based mining activity on Lake Lefroy and adjacent land. The operation includes the discharge of mine dewatering to the lake surface, and the construction of mine infrastructure, including open pits, underground operations waste rock dumps and tailings storage facilities.</p> <p>SIGMC proposes to construct a hybrid energy-source powered microgrid on the existing St Ives Gold Mine (SIGM) site, which is located to the South of the town of Kambalda East.</p> <p>The proposed project would power the vast majority of the site's operations from predominantly renewable energy sources significantly reducing the overall greenhouse gas emissions from SIGMC operations. The proposed project footprint extends approximately 13.5km to the Southeast from the existing mill at Lefroy.</p> <p>The St Ives Hybrid Microgrid Project (SIHMP - the Project) will consist of a wind farm comprising up to 10 wind turbine generators (WTG's), a solar farm, Thermal generation plant, battery energy storage system (BESS), new substation and associated transmission, power conditioning and supporting infrastructure. Supporting infrastructure includes elements such as access tracks and roads, a control room, operations and maintenance facilities and construction works such as crane pads.</p> <p>The proposed Project is located entirely on existing SIGMC owned mining leases where there are ongoing mining operations, including supporting power distribution infrastructure. The land is also used for cattle grazing.</p> <p>The proposed project will also see the existing Development Envelope approved under Ministerial Statement 1128 extended by approximately 572 hectares (from 45,013 ha to 45,585 ha). The authorised extents of approved clearing within the amended Development Envelope will remain at 4,061 ha of lake based operations, 5,085 ha of land based operations, and 110 ha of riparian zone disturbance. No changes to existing exclusion zones are proposed.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed amendment Area (ha)	Combined extent, capacity or range
Physical elements				
Existing mine elements, including: <ul style="list-style-type: none"> • Open Pits • Underground portals and mining • Haul roads and access roads • Waste Rock Landforms (WRLs) • Topsoil stockpiles 	Figure 1A, 1B and 1C		N/A	
Existing processing elements, including: <ul style="list-style-type: none"> • Ore stockpiles • Processing Plant (Lefroy Mill) • Tailings storage facilities • Heap Leach • Process water ponds 	Figure 1A, 1B and 1C	Up to 4,061 ha of disturbance for lake-based operations, 5,085 ha of disturbance for land based operations, and 110 ha of riparian zone disturbance within a development envelope of 45,013 ha	N/A	Up to 4,061 ha of disturbance for lake-based operations, 5,085 ha of disturbance for land based operations, and 110 ha of riparian zone disturbance within a development envelope of 45,585 ha
Existing infrastructure elements, including: <ul style="list-style-type: none"> • Accommodation village • Buildings, including offices, ablutions and crib rooms • Supporting infrastructure 	Figure 1A, 1B and 1C		N/A	

Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed amendment Area (ha)	Combined extent, capacity or range
Renewable infrastructure, including: <ul style="list-style-type: none"> Solar Farm, Thermal Generation Plant and BESS Wind farm (including contingency) Supporting Infrastructure 	Figure 3-4	N/A	Approx 328.4 ha within the 45,585 ha Development Envelope	Approx 328.4 ha within the 45,585 ha Development Envelope
Construction elements				
Concrete batching plants	N/A	N/A	N/A	N/A
Operational elements				
Groundwater abstraction for water supply and mine dewatering	A number of groundwater extraction bores across the site	Abstraction of up to 34.015 GL/a	No change	Abstraction of up to 34.015 GL/a
Management of surplus water	Discharged to lake Lefroy	Discharge of up to 30,000,000 tonnes per annum to Lake Lefroy	No change	Discharge of up to 30,000,000 tonnes per annum to Lake Lefroy
Waste rock backfilling	N/A	A minimum of approximately 95 million tonnes and backfilling of sterilised pits	No change	A minimum of approximately 95 million tonnes and backfilling of sterilised pits
Processing throughput capacity	N/A	Up to 9,000,000 tonnes per annum	No change	Up to 9,000,000 tonnes per annum
TSF capacity	Figure 1A, 1B and 1C	Up to 9,000,000 tonnes of tailings deposited per annum.	No change	Up to 9,000,000 tonnes of tailings deposited per annum.

Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed amendment Area (ha)	Combined extent, capacity or range
Wind production energy	Figure 3-4	N/A	Up to 10 x 6 to 7MW* Wind Turbine Generators Total approx. 60MW Wind Farm	Up to 10 x 6 to 7MW* Wind Turbine Generators Total approx. 60MW Wind Farm
Solar farm energy production	Figure 3-4	N/A	40MW Nominal	40MW Nominal
Thermal Generation Plant	Figure 3-4	N/A	40MW Nominal	40MW Nominal
Battery Energy Storage System (BESS)	Figure 3-4	N/A	30MW Nominal	30MW Nominal
Overhead powerlines	Figure 3-4	N/A	66kV and 33kV	66kV and 33kV
Proposal elements with greenhouse gas emissions				
Construction elements:				
Emissions	Original Proposal (tCO₂-e/per annum)		Proposed Amendment (tCO₂-e/per annum)	
Scope 1	Not a key environmental Factor, according to the EPA Report 1645		4,282	
Scope 2			NA	
Scope 3			8,815.5	

Operation elements:				
Emissions	Original Proposal (tCO₂-e/per annum)		Proposed Amendment (tCO₂-e/per annum)	
Scope 1	Not a key environmental Factor, according to the EPA Report 1645		21,949	
Scope 2			0	
Scope 3			NA	
Rehabilitation				
<p>The post-construction phase rehabilitation may be restricted to construction laydown areas no longer required in the operational phase.</p> <p>SIGM is committed to the rehabilitation of all disturbed areas to be agreed final land use(s), this is extended to include disturbance and any potential contamination management throughout the operational life expectancy of Project specific infrastructure.</p> <p>Due to the nature and relatively small/narrow SIHMP operational footprint, post construction phase rehabilitation may be restricted to small construction laydown areas utilised during construction phase only but are no longer required during the operational phase.</p>				
Commissioning				
Project commissioning is planned for Q3 2024.				
Decommissioning				
If decommissioning and demolition is required, phased activities are to be supported by suitably qualified and experienced specialists and documented reports.				
Other elements which affect extent of effects on the environment				
Proposal time*	Maximum project life	N/A	~29.5 years from granting of all required regulatory approvals	~29.5 years from granting of all required regulatory approvals
2024-2025	Construction phase	N/A	~ 1.5 years	~ 1.5 years
2025-2050	Operations phase	N/A	25 years	25 years
2053	Decommissioning phase	N/A	~ 3 years post operations	~ 3 years post operations

* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).

N/A: Not Applicable

NA: Not Available



Figure 1 Revised development envelope



Figure 2 Indicative footprint and changes to development envelope