

Environmental Protection Act 1986

Section 43A

**NOTICE OF DECISION TO CONSENT TO AMEND A REFERRED PROPOSAL
DURING ASSESSMENT**

PERSON TO WHOM THIS NOTICE IS GIVEN

VRX Silica Limited (ABN: 59 142 014 873)
Level 1, 6 Thelma Street
WEST PERTH WA 6005

PROPOSAL TO WHICH THIS NOTICE RELATES:

Arrowsmith North Silica Sand Project
Assessment No. 2291

Pursuant to s. 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) gives approval to the assessment of the proposal being completed in respect of the proposal as amended in accordance with the proponent's request:

- A reduction in the extent of the Mine Development Envelope from 1,025 hectares (ha) to 347.3 ha.
- A reduction in the extent of clearing within the Mine Development Envelope from 360 ha to 347.3 ha.
- A reduction in the extent of the Access Development Envelope from 61 ha to 60.4 ha.
- A reduction in the power generating capacity of the gas fired power station from 10 megawatts (MW) to 5 MW.

The amended proposal content document and figures are attached.

EFFECT OF THIS NOTICE:

1. The assessment of the proposal is to be completed in respect of the proposal as amended in accordance with the decision set out in this notice.
2. The proposal as amended in accordance with this notice is taken to have been referred to the EPA under s. 38 of the EP Act.

RIGHTS OF APPEAL:

There are no rights of appeal under the EP Act in respect of this decision.

A handwritten signature in blue ink, appearing to read 'MAT TONT', followed by a stylized flourish.

Prof. Matthew Tonts
Delegate of the Environmental Protection Authority
CHAIR

14 June 2022

Attachment 1- Amended proposal content document and figure showing the amendments

Arrowsmith North Silica Sand Project

Proposal Content Document

Table 1: General proposal content description

Proposal title	Arrowsmith North Silica Sand Project
Proponent name	VRX Silica Limited
Short description	<p>The Proposal is to develop a high-grade silica sand mine in the Geraldton Sandplain bioregion of WA, approximately 270 km north of Perth. The Proposal will produce a high-grade silica sand product via extraction and mechanical upgrading.</p> <p>The Proposal includes the sequential block mining of silica sand, development of a mine feed plant, moveable surface conveyor, pipeline, processing plant, stockpiles, freshwater supply bore, access corridor, laydown, administration, water storage and associated infrastructure including: gas fired power station, communications equipment, offices, workshop and additional laydown areas.</p> <p>Access to the site will be via an Access Road connecting the Mine to Brand Highway. A freshwater supply bore, water pipeline and Access Road will be located within the Access Development Envelope. All other infrastructure will be located within the Mine Development Envelope.</p> <p>Product will be hauled via road to Geraldton port where it is exported internationally.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
<p>Mine and Associated Infrastructure</p> <ul style="list-style-type: none"> • Mine feed plant (mobile) • Conveyor (mobile) • Surface slurry pipeline (mobile) • Processing plant and Stockpiles • Topsoil stockpiles • Water storage • Gas fired power station <p>Associated infrastructure including administration, communications equipment, offices, workshop and laydown areas.</p>	Figure 1	Clearing of 347.3 ha within the 347.3 ha Mine Development Envelope.
<p>Access Corridor</p> <p>Access Road, water bore and water pipeline</p>	Figure 1	Clearing of no more than 6.5 ha within the 60.4 ha Access Development Envelope.
Construction elements		
Groundwater Abstraction	Figure 1	Abstraction of up to 0.9 GL/yr from the Yarragadee aquifer

Operational elements		
Mining and Vegetation Direct Transfer (VDT)	Figure 1	Mining to be undertaken such that topsoil and vegetation is transferred directly to rehabilitation areas via VDT.
Silica Sand production	Figure 1	Production of up to 2 Mtpa of silica sand
Energy production	Figure 1	Up to 5 MW
Groundwater Abstraction	Figure 1	Abstraction of 0.9 GL/yr from the Yarragadee aquifer
Proposal elements with greenhouse gas emissions		
Construction elements:		
Scope 1	<u>Land use change</u>	GHG emissions of 1,000 - 1,200 tCO ₂ -e
Scope 2	None	
Scope 3		Annual Scope 3 emissions of up to approximately 30,416 tpa during the first three years.
Operation elements:		
Scope 1	<u>Land use change</u>	Annual GHG emissions of 1,000 - 1,200 tCO ₂ -e Peak total GHG emissions of 33,160 tCO ₂ -e <u>Energy Production</u> Maximum annual GHG emissions of 11,300 tCO ₂ -e for the first 3 years and 19,100 tCO ₂ -e each year thereafter. Maximum 550,170 tCO ₂ -e GHG emissions over the life of the Proposal (conservatively assumes no renewable energy is utilised).
Scope 2	None	
Scope 3		GHG emissions of 60,471 tCO ₂ -e per year
Rehabilitation		
<p>Areas temporarily cleared for laydown during the construction phase will be rehabilitated following construction.</p> <p>Final closure and rehabilitation to commence within 1 year of cessation of operations.</p> <p>Mined areas are to be progressively rehabilitated using VDT and infill planting.</p>		
Commissioning		
N/A		
Decommissioning		
Removal of all above surface and buried infrastructure within 2 years of cessation of operations.		

Other elements which affect extent of effects on the environment		
Proposal time	Construction phase	Approximately 6 months.
	Operations phase	30 years
	Decommissioning phase	Approximately 2 years after operations



Figure 1 – Amended Development Envelope

Summary of reasons for decision – request to amend a referred proposal during assessment under s. 43A of the *Environmental Protection Act 1986*

Proposal title: Arrowsmith North Silica Sand Project

Environment Online Reference Number: N/A

Date request to amend referred proposal under s. 43A received: 5 May 2022

Proponent: VRX Silica Limited

Proposal referral date: 17 March 2021

Level of assessment: Public Environmental Review

Existing referred proposal:

The proposal is to develop a high-grade silica sand mine in the Geraldton Sandplain bioregion of WA, approximately 270 kilometres (km) north of Perth. The proposal will produce a high-grade silica sand product via extraction and mechanical upgrading.

The proposal includes the sequential block mining of silica sand, development of a mine feed plant, moveable surface conveyor, pipeline, processing plant, stockpiles, freshwater supply bore, access corridor, laydown, administration, water storage and associated infrastructure including: gas fired power station, communications equipment, offices, workshop and additional laydown areas.

Access to the site will be via an Access Road connecting the Mine to Brand Highway. A freshwater supply bore, water pipeline and Access Road will be located within the Access Development Envelope. All other infrastructure will be located within the Mine Development Envelope. Product will be hauled via road to Geraldton port where it will be exported internationally.

Short description of amendment(s) sought:

The proponent seeks to amend the proposal by:

- Reducing the extent of the Mine Development Envelope from 1,025 hectares (ha) to 347.3 ha.
- Reducing the extent of clearing within the Mine Development Envelope from 360 ha to 347.3 ha.
- Reducing the extent of the Access Development Envelope from 61 ha to 60.4 ha.
- Reducing the power generating capacity of the gas fired power station from 10 megawatts (MW) to 5 MW.

Decision:

Amendment(s) to proposal as set out in attachment 1 is approved.

Environmental factors relevant to amendment(s):

- Flora and Vegetation – reduction in the extent of clearing of native vegetation.
- Terrestrial Fauna – reduction in loss of fauna habitat.
- Inland Waters – avoidance of the Arrowsmith River.

- Air Quality – reduction in air emissions associated with the combustion of gas for production of electricity.
- Social Surroundings – avoidance of a registered Aboriginal Heritage site.
- Greenhouse Gas Emissions – reduction in greenhouse gas emissions.

Summary of likely changes to environmental impacts from proposed amendment

Amendment sought	Changes to environmental impacts
<p>A 677.7 ha reduction in Mine Development Envelope.</p> <p>A 12.7 ha reduction in the extent of clearing within the Mine Development Envelope.</p> <p>Changes to the development envelope are shown in Figure 1.</p>	<p>Likely decreased impacts to:</p> <ul style="list-style-type: none"> • Flora and vegetation by reducing the amount of native vegetation clearing and avoiding some significant flora species. • Terrestrial fauna habitat by reducing the amount of native vegetation clearing within high value habitat areas.
<p>A 0.6 ha reduction in the Access Development Envelope.</p> <p>Changes to the development envelope are shown in Figure 1.</p>	<p>Likely decreased impacts to:</p> <ul style="list-style-type: none"> • Inland waters by avoiding the Arrowsmith River. • Social surroundings by avoiding a registered Aboriginal Heritage Site (DPLH ID: 30069).
<p>Reduction in the capacity of the gas fired power station from 10 MW to 5 MW.</p>	<p>Likely decreased impacts to:</p> <ul style="list-style-type: none"> • Greenhouse gas emissions. • Air quality due to lower emissions associated with the combustion of gas for production of electricity.

The EPA advises that the potential impacts, and the pathways for those impacts, to each of the identified environmental factors remains unchanged. These impacts will be considered during the assessment of the Environmental Review Document.

The EPA considers that the proposed changes will not increase potential for inconsistency of the proposal with each of the EPA's identified environmental factor objectives.

Summary of consultation

The proposed amendments are an outcome of consultation with EPA Services, which had previously advised the proponent to revise aspects of the proposal to align with the recent EP Act amendments and revised procedures suite. The proponent was advised that the EPA has an expectation that surveys cover the entire development envelope and will not accept

development envelopes that are much greater than the maximum extent of a proposal element. The development envelope is to include the maximum area within which the proposal footprint will be located.

Summary of consideration of amendment

The EPA has considered whether, if the proposal were already approved, the amendment would be a significant amendment. This has included considering the likely significance of:

- Effects of the proposed amendment on its own
- Effects of the proposed amendment in the context of the existing referred proposal
- Cumulative environmental impacts
- Holistic impacts

The EPA has considered whether it has sufficient information about the proposed amendment to be able to reasonably proceed with assessment of the amended proposal with or without performing any additional functions at this stage.

The EPA has considered whether the amended proposal will still be substantially the same character as the existing referred proposal.

1 – Approval – not a significant amendment

The EPA considers the amended proposal to be substantially the same character as the existing referred proposal, and does not consider that the amendment would be a significant amendment if the proposal were already approved. The EPA considers it has enough information to reasonably proceed with assessment of the amended proposal without performing any additional functions at this stage.

Attachments

1. Amended Proposal content document

Appeals: Decision not appealable.



Prof. Matthew Tonts

CHAIR

Delegate of the Environmental Protection Authority

Date: 14 June 2022

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Figure 1 – Amended Development Envelope

