#### **Environmental Protection Act 1986**

#### Section 43A

# NOTICE OF DECISION TO CONSENT TO CHANGE TO PROPOSAL DURING ASSESSMENT

#### PERSON TO WHOM THIS NOTICE IS GIVEN

(a) Agrimin Limited (ACN: 122 162 396) 2C Loch Street NEDLANDS WA 6009

#### PROPOSAL TO WHICH THIS NOTICE RELATES:

Mackay Sulphate of Potash Project Assessment No. 2193

Pursuant to section 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) consents to the proponent making the following changes to the proposal during assessment without a revised proposal being referred:

- Decrease in the On-lake Development Envelope from 218,400 ha to 217,261 ha, decrease of 1,139 ha.
- Increase in the Off-lake Development Envelope from 680 ha to 688 ha, increase of 8 ha.
- Decrease the Northern Infrastructure Development Envelope from 34,486 ha to 33,928 ha, decrease of 558 ha.
- Decrease the Southern Infrastructure Development Envelope from 11,829 ha to 11,799 ha, decrease of 30 ha.

See Figure 1 and 2 that depicts the changes to the development envelopes.

### **EFFECT OF THIS NOTICE:**

1. The EPA considers that the change is unlikely to significantly increase any impact that the proposal may have on the environment. The proponent may change the proposal as provided for in this notice.

#### **RIGHTS OF APPEAL:**

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

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Professor Matthew Tonts

Delegate of the Environmental Protection Authority

CHAIR

11 June 2021

### Schedule 1

## **Change to Proposal**

**Table 1: Summary of the Proposal** 

Proposal title	Mackay Sulphate of Potash Project
Short description	Agrimin Limited proposes to develop a greenfields potash fertiliser operation designed to operate for a 20 year period.
	The Proposal involves the on-lake development of trenches and solar evaporation ponds for brine extraction and SOP production. The off-lake development includes a processing plant, associated site infrastructure and access roads for trucking SOP product to Wyndham Port.
	A northern linear access corridor will include the primary site access road, and potentially a water supply pipeline. A southern infrastructure corridor may be used as an alternate water supply option.

Table 2: Location and proposed

Element	Current Proposal extent (June S43A approved)	Proposed change to the Proposal extent		
Physical elements				
On-lake Development Envelope (On-LDE): Brine extraction trenches and evaporation ponds	Disturbance of no more than 15,000 ha within the 218,400 ha On-lake Development Envelope.	Clearing of no more than 15,000 ha of native vegetation within the 217,261 ha On-lake Development Envelope.		
Off-Lake Development Envelope (Off-LDE): Processing infrastructure, access roads, associated project infrastructure (camp, airstrip)	Clearing of no more than 200 ha within the 680 ha Off-lake Development Envelope.	Clearing of no more than 200 ha of native vegetation within the <b>688</b> ha Off-lake Development Envelope.		
Northern Infrastructure Development Envelope (NIDE): Haul road	Clearing of no more than 1,000 ha of native vegetation within the 34,486 ha Northern Infrastructure Development Envelope.	Clearing of no more than 1,000 ha of native vegetation within the 33,928 ha Northern Infrastructure Development Envelope.		
Southern Infrastructure Development Envelope (SIDE): Access track and water pipeline	Clearing of no more than 300 ha of native vegetation within the 11,829 ha Southern Infrastructure Development Envelope.	Clearing of no more than 300 ha of native vegetation within the 11,799 ha Southern Infrastructure Development Envelope.		
Operational elements				

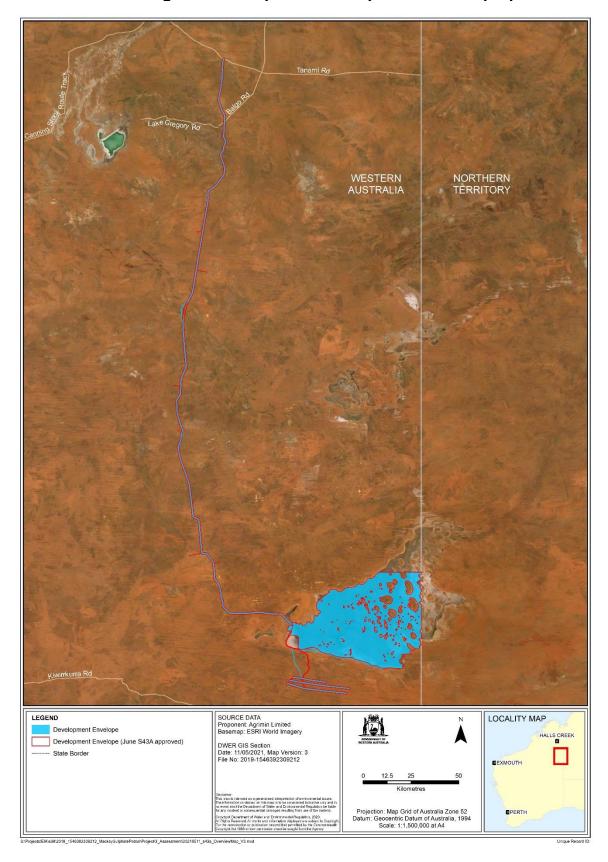
Brine Abstraction	Abstraction of up to 100 GL per annum (GL/a) of hypersaline brine.	No change
Water Abstraction	Abstraction of up to 3.5 GL/a of groundwater for processing.	No change
Water Treatment	Treatment of no more than 3.5 GL/a of water through a reverse osmosis plant.	No change
Waste Salt	Disposal of no more than 18 million tonnes per annum of waste salt to be retained on the lake surface.	No change

Attachment 1 – Regional location Attachment 2 – Changes to development envelope overview of proposal

## Attachment 1 - Regional location



Attachment 2 - Changes to development envelope overview of proposal



#### **Environmental Protection Act 1986**

#### Section 43A

#### STATEMENT OF REASONS

#### CONSENT TO CHANGE PROPOSAL DURING ASSESSMENT

Proposal: Mackay Sulphate of Potash Project

**Proponent:** Agrimin Limited

#### **Decision**

For the reasons outlined below, the EPA has determined to consent to the Proponent changing the Proposal outlined in Schedule 1 attached to this Statement of Reasons.

#### **Background**

On 21 December 2018, Agrimin Limited (the proponent) referred the Proposal to the Environmental Protection Authority (EPA) under section 38 of the *Environmental Protection Act 1986* (EP Act). The Proposal included the development of a network of shallow trenches on the surface of Lake Mackay to collect brine, which would be transferred to evaporation ponds to be harvested and processed to produce a fertiliser product. The current Proposal consists of:

- Brine trenches
- Evaporation ponds
- Processing plant
- Gas-fired power station
- A groundwater borefields
- Reverse osmosis
- Two infrastructure corridors for haul road and pipelines.

On 30 January 2019 the EPA determined to assess the Proposal at the level of public environmental review – with a 4-week public review period.

The EPA Chair approved a S43A to changes to the Proposal on 12 June 2020. These changes included:

- Increase the area of off-lake disturbance from 100 hectares (ha) to 200 ha.
- Increase the on-lake disturbance from 10,000 ha to 15,000 ha.
- Decrease the Northern Infrastructure Development Envelope (NIDE) from 57,808 ha to 34,486 ha.
- Decrease the Southern Infrastructure Development Envelope (SIDE) from 12,300 ha to 11,829 ha.
- Increase brine abstraction from 70 GL/a to 100 GL/a.
- Decrease abstraction of groundwater from no more than 5 GL/a to no more than 3.5 GL/a.
- Decrease water treatment from no more than 5 GL/a to no more than 3.5 GL/a.

The proponent has been refining its Proposal and in advance of the EPA preparing a report on the outcome of its assessment, the proponent has sought the EPA's consent to change the Proposal.

#### **Relevant Statutory and Administrative Provisions**

Section 3.8 of the Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2016 guides what information the EPA requires from a person wanting to change its Proposal during assessment.

The proponent is required to provide:

- details of the proposed change
- · statement of the significance of the change and
- rationale for the change.

#### Materials considered in making this decision

In determining whether to consent to the proponent changing the Proposal the EPA has considered the following:

- 1. Mackay Potash Project Section 43A request to change Proposal during assessment (19 March 2021)
- 2. Mackay Sulphate of Potash Project Environmental Review Document (Stantec, November 2020)
- 3. Environmental Referral Supporting Document (Agrimin, December 2018)
- 4. The current stage of assessment
- 5. EPA Guidance and procedures.

#### Consideration

#### 1. Nature of the proposed change

The change to the Proposal includes the following aspects:

- Decrease in the On-lake Development Envelope from 218,400 ha to 217,261 ha, decrease of 1,139 ha.
- Increase in the Off-lake Development Envelope from 680 ha to 688 ha, increase of 8 ha.
- Decrease the Northern Infrastructure Development Envelope from 34,486 ha to 33,928 ha, decrease of 558 ha.
- Decrease the Southern Infrastructure Development Envelope from 11,829 ha to 11,799 ha, decrease of 30 ha.

#### Refinement of the On-lake Development Envelope

Since the approval of the previous Section 43A on the 12 June 2020, the proponent has undertaken mapping work that has refined the On-Lake Development Envelope, with particular focus on the lake islands and their margins. Where the spatial files had previously outlined arbitrary boundaries around the lake edge and islands, further fine-scale mapping work has been undertaken for the purpose of enhancing the lake riparian zone boundary interface, to depict exclusion zones more accurately. In undertaking this work, the On-Lake Development Envelope has been reduced by

1,139 ha, so that its extent is now proposed to be 217,261 ha. There is no proposed change to the amount of disturbance within this envelope.

#### Refinement of the Off-lake Development Envelope

The above mapping work for the On-lake Development Envelope has more accurately mapped the lake edge which has in turn, allowed the refinement the Off-Lake Development Envelope, Envelope has increased by 8 ha, so that its extent is now proposed to be 688 ha. There is no proposed change to the amount of disturbance within this envelope.

#### Re-alignment of the Northern Infrastructure Development Envelope:

Re-alignment of the Northern Infrastructure Development Envelope including:

- A deviation from the current proposed alignment with a reduced corridor width, avoiding a population of Great desert skink (Listed nationally as vulnerable).
- Refining the location of access tracks leading from the haul road to borrow pits to reduce footprint and follow favourable topography of the landscape.
- Decrease the size of the NIDE from 34,486 to 33,928 ha.

#### Changes to the Southern Infrastructure Development Envelope:

- Relinquishment of the proposed western 'dog leg' access route.
- Addition of an alternative route for an access track and water pipeline leading from the Off-lake Development Envelope to the borefield, allowing for essential infrastructure to be progressively relocated away from areas of elevated heritage significance.
- Modification of the development envelope to allow for optimising the design of associated renewable energy infrastructure.
- Decrease the size of the SIDE from 11,829 ha to 11,799 ha.

#### New access track

Currently, the proponents proposed pipeline and infrastructure corridor would require the pre-existing Kiwirrkurra-Balgo Road to be upgraded (widened). However, since submitting the draft ERD, the proponent has conducted further survey work with Traditional Owners which identified that the existing track was in close proximity to sensitive heritage values associated with the clay pans and that the proposed road widening was not supported.

The proponent proposes to avoid the potential impacts to heritage values caused by widening the current track by proposing a new track alignment, which has been cleared from a heritage standpoint, by the Traditional Owners in February 2021.

#### Relinquishment of the Dog-leg

The proponent is proposing to relinquish the western 'dog-leg' access track that previously allowed for alternative access routes to the borefield. The relinquishment of the 'dog-leg' allows for the Proposal to counterbalance any potential impacts from ground disturbance required to implement the proposed access track (as described

above), while making their own operational activities safer and more efficient through adding a more direct access track.

#### Changes to the SIDE

A new area to the west of the SIDE will result in a 53.8 ha change in development envelope, this is where the wind turbines are proposed to be located, to optimise the layout of renewable energy components of the project. The rationale for the changes has been considered in the context of the EPA's Instructions on How to Define the Key Characteristics of a Proposal (2017), allowing flexibility for Proposal's infrastructure layout while constraining the size of the SIDE.

With reduction in other areas, such as the 'dog-leg' track alignment, the overall change to the SIDE is decrease of 30 ha. The extent of clearing (300 ha) within this development envelope will not be altered from the current Proposal as described in the draft ERD.

Table 1. Proposed changes to development envelopes and clearing

Element	Original referral	Current Proposal extent	Proposed change to the Proposal extent	Change
On-lake Development Envelope (On-LDE): Brine extraction trenches and evaporation ponds	Disturbance of no more than 10,000 ha within the 218,400 ha On-LDE.	Disturbance of no more than 15,000 ha within the 218,400 ha On-LDE.	Clearing of no more than 15,000 ha of native vegetation within the 217,261 ha On- LDE.	No change to the amount of clearing of native vegetation and reduction of 1,139 ha of the On-LDE.
Off-Lake Development Envelope (Off-LDE): Processing infrastructure, access roads, associated project infrastructure (camp, airstrip)	Clearing of no more than 100 ha within the 680 ha Off-LDE.	Clearing of no more than 200 ha within the 680 ha Off-LDE.	Clearing of no more than 200 ha of native vegetation within the <b>688 ha</b> Off- LDE.	No change to the amount of clearing of native vegetation and increase of 8 ha of the Off-LDE.
Northern Infrastructure Development Envelope (NIDE): Haul road	Clearing of no more than 1,000 ha of native vegetation within the 57,808 ha NIDE.	Clearing of no more than 1,000 ha of native vegetation within the 34,486 ha NIDE.	Clearing of no more than 1,000 ha of native vegetation within the 33,928 ha NIDE.	No change to the amount of clearing of native vegetation and a decrease of 558 ha of the NIDE.
Southern Infrastructure Development Envelope (SIDE): Access track and water pipeline.	Clearing of no more than 300 ha of native vegetation within the 12,300 ha SIDE	Clearing of no more than 300 ha of native vegetation within the 11,829 ha SIDE.	Clearing of no more than 300 ha of native vegetation within the 11,799 ha SIDE.	No change to the amount of clearing of native vegetation and a decrease of 30 ha of the SIDE.

These amendments to define the spatial extent of the On-lake Development Envelope, Off-lake Development Envelope, NIDE and the SIDE are within the scope of the referred Proposal and does not result in a significant increase to any impact the Proposal may have on the environment.

#### 2. Stage of the assessment process.

- The EPA set a level of assessment of Public Environmental Review on 30 January 2019.
- A S43A change to Proposal was approved 12 June 2020.
- The Environmental Scoping Document (August 2020) was approved 10 September 2020.
- The proponent submitted a first draft Environmental Review Document (November 2020).
- The proponent is currently working through agency comments on the first draft ERD and will resubmit a draft ERD soon (likely end July 2021).
- The updated draft ERD will then be advertised for a 4-week public comment period.

#### 3. Currency, relevance and reliability of the information, including submissions.

The information relating to the change is considered reliable and relevant in relation to changes to development envelopes. The proponent will provide a detailed assessment of the likely impacts of the change to the Proposal during operation and closure, in the environmental review document.

#### 4. Community engagement

Community engagement has not yet been undertaken in relation to the change. The public will have an opportunity to comment on the Proposal during the public review period of the draft ERD. Ongoing consultation with Traditional Owners regarding the Proposal is being undertaken by the proponent.

#### 5. Level of public concern

There has been limited public concern in relation to the proposed Mackay Sulphate of Potash Project. Three comments were received when the referral information for the Proposal was advertised for comment.

# Consideration of Whether the Change is Unlikely to Significantly Increase Any Impact that the Proposal May Have on the Environment

The following were considered:

 Values, sensitivity and the quality of the environment which is likely to be impacted

The EPA Chairs determination identified the preliminary key environmental factors for the current Proposal as:

- Flora and Vegetation;
- Subterranean Fauna;
- Terrestrial Fauna;

- Inland Waters; and
- Social Surroundings.

These factors were also considered in the Environmental Scoping Document endorsed by the EPA on 10 September 2020. The changes to the Proposal from level of assessment do not require any additional factors to be considered as preliminary key environmental factors.

# Extent (intensity, duration, magnitude and geographic footprint) of the likely impacts

- The changes will result in a reduction in total area of the development envelopes from 265,395 ha to 263,676 ha, a decrease of 1,719 ha (0.6%), and no change in total clearing of native vegetation of no more than 16,500 ha across all four development envelopes.
- The intensity and duration of construction in the development envelopes will remain unchanged from the original Proposal.
- A reduction from 218,400 ha to 217,261 ha, a change of 1,139 ha (0.5%) in the On-lake Development Envelope. No change to the previously proposed geographic footprint of no more than 15,000 ha.
- An increase from 680 ha to 688 ha, a change of 8 ha (1.17%) in the Offlake Development Envelope. No change to the previously approved geographic footprint of no more than 200 ha.
- A reduction from 34,486 ha to 33,928 ha, a change of 558 ha (1.6%) in the Northern Infrastructure Development Envelope. No change to the previously proposed geographic footprint of no more than 1,000 ha.
- A reduction from 11,829 ha to 11,799 ha, a change of 30 ha (0.2%) in the Southern Infrastructure Development Envelope. No change to the previously proposed geographic footprint of no more than 300 ha.

#### • Consequence of the likely impacts (or change)

The proposed changes result in a reduction to the development envelope by 1,719 ha providing greater certainty in relation to defining the area and amount of clearing of significant flora and vegetation, and habitat supporting locally restricted significant fauna species potentially impacted by the proposal. Furthermore, the changes that the proponent are proposing occur in the same, unrestricted and widespread vegetation units and fauna habitat types, which are not conservation listed, and therefore the consequences of the change are unlikely to significantly increase or be altered from what was previously proposed in the previous section 43A approved 12 June 2020 and draft ERD submitted to DWER 11 December 2020.

The changes to the proposal do not alter the types of impacts associated with the proposal. Given the scale of the proposal within a vast and mostly uniform landscape consisting of a large salt lake and surrounding dune fields, the changes are unlikely to significantly increase or alter the types of impacts associated with implementing the Proposal as currently approved.

#### • Resilience of the environment to cope with the impacts or change

The EPA considers the resilience of the environment to cope with the change to the Proposal remains unchanged from that of the original Proposal, should it be implemented.

#### • Cumulative impacts with other projects

The proposed sulphate of potash project is located in a greenfields site in a remote area of the Great Sandy Desert adjacent to the Northern Territory border. There are no other developments in the vicinity and therefore cumulative impacts are not anticipated.

The Proponent will be required to address cumulative impacts as part of the public environmental review process, including discussing other existing or reasonably foreseeable development in the vicinity of the Proposal, such as mining operations, and potential impacts from climate change.

### Connections and interactions between parts of the environment to inform holistic view of impacts of the whole environment

Based on the scale of the proposed changes, the connections and interactions of the environment are likely to be comparable to those identified in the original referral. A holistic assessment of the impacts of the Proposal on the whole environment will be undertaken during the EPA's assessment of the Proposal. This will describe the connections and interactions between the parts of the environment (environmental factors) and discuss predicted outcomes in relation to the environmental principles and the EPA's environmental objectives.

# Level of confidence in the prediction of impacts and the success of proposed mitigation

A detailed assessment of the impacts and the proposed mitigation will be undertaken during the assessment of the Proposal.

The change to the Proposal is based on the most recently available information provided by the Proponent. The proponent has identified areas that need to be avoided through further environmental studies, hence these proposed changes, which have allowed for an increased confidence in the prediction of impacts since the draft ERD.

# • Public interest about the likely effect of the Proposal, if implemented, on the environment, and public information that informs the EPA's assessment

The Proposal is being assessed at the level of public environmental review – with a 4-week public comment period, which will provide an opportunity for scrutiny of the Proposal and its potential impacts on the environment.

#### Conclusion

In conclusion, the EPA considers that the change is unlikely to significantly increase any impact the Proposal may have on the environment primarily because:

- The proposed changes do not alter the types of impacts likely to be caused by the Proposal;
- The proposed changes do not increase clearing or ground disturbance as previously proposed in the referral and draft ERD;
- The proposed changes provide for an overall reduction in the extent of the development envelopes, as well as improved delineation of adequate buffer zones for local populations of significant fauna species and areas of elevated heritage significance; and
- The proposed changes further allow for the application of the EPA's mitigation hierarchy (avoidance and mitigation measures) for significant fauna species and cultural sites, specifically through direct avoidance measures.

Figure 1 - Regional location

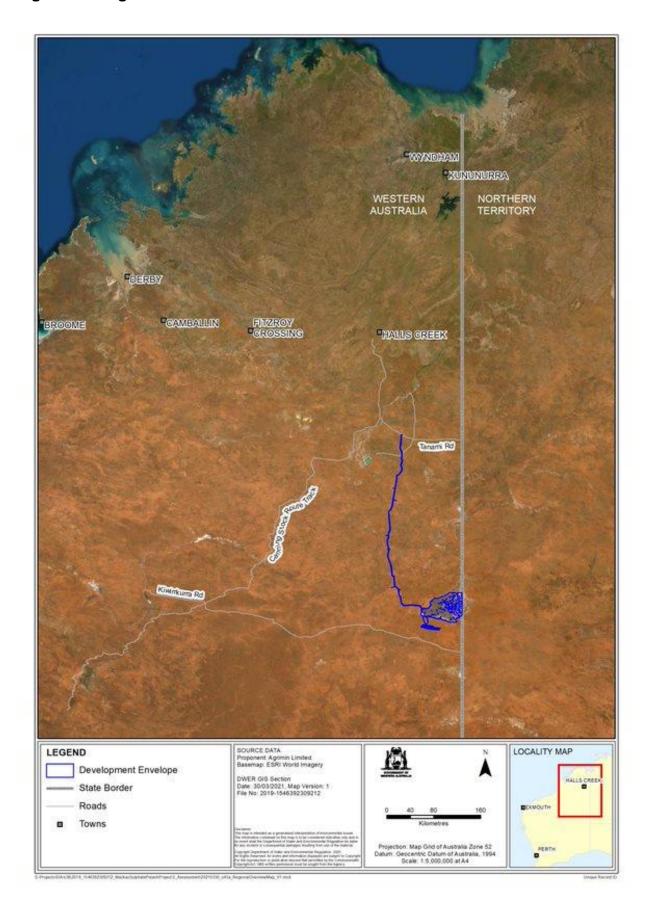


Figure 2 – Changes to development envelope overview of proposal

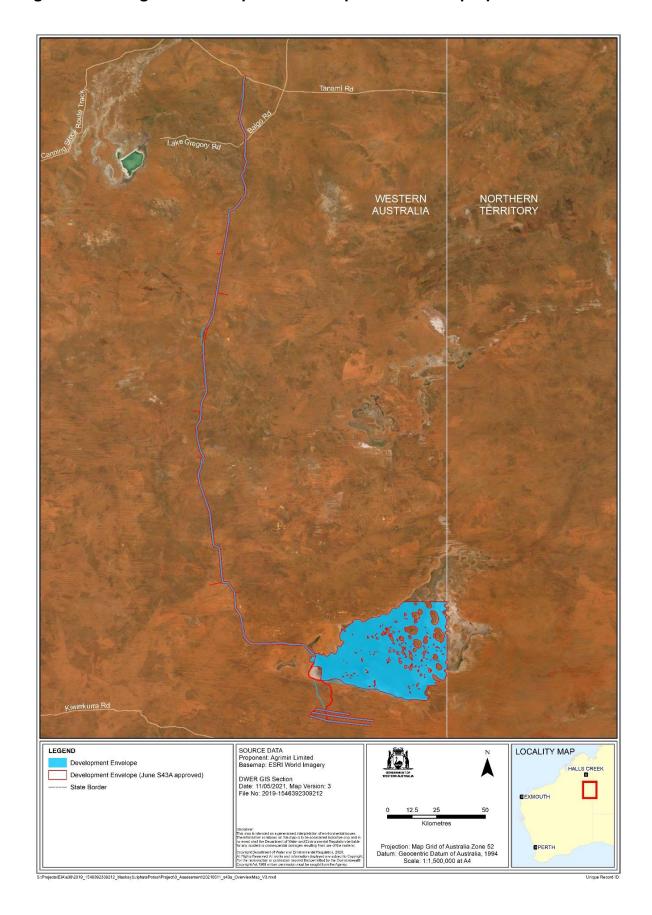


Figure 3 – Changes to the on-lake development envelope

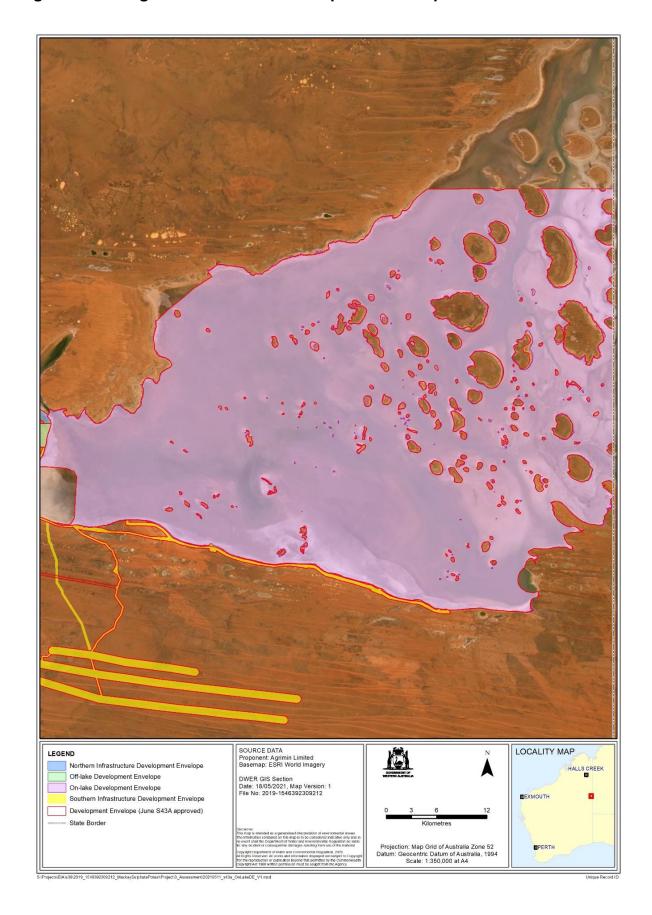


Figure 4 – Changes to the off-lake development envelope

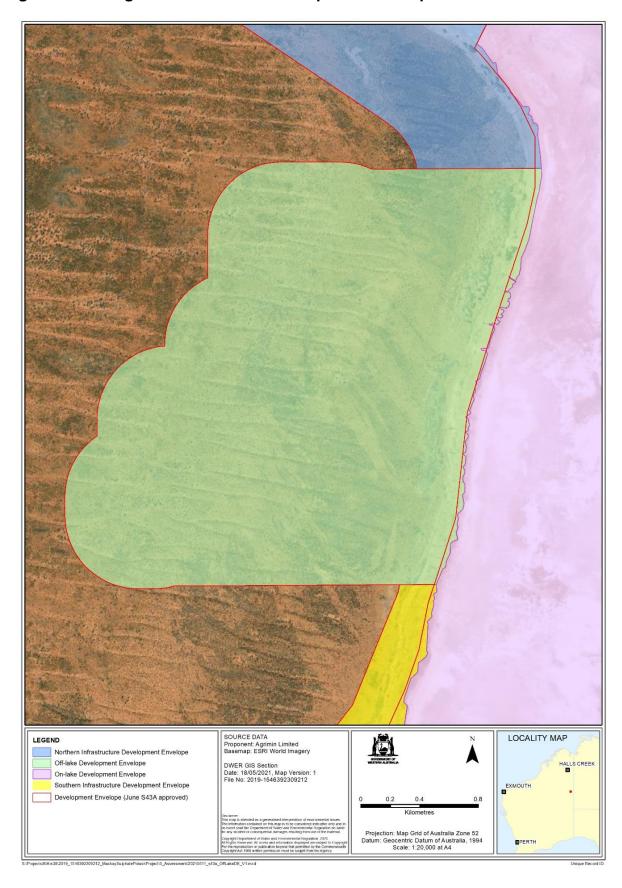


Figure 5 – Changes to the northern infrastructure development envelope

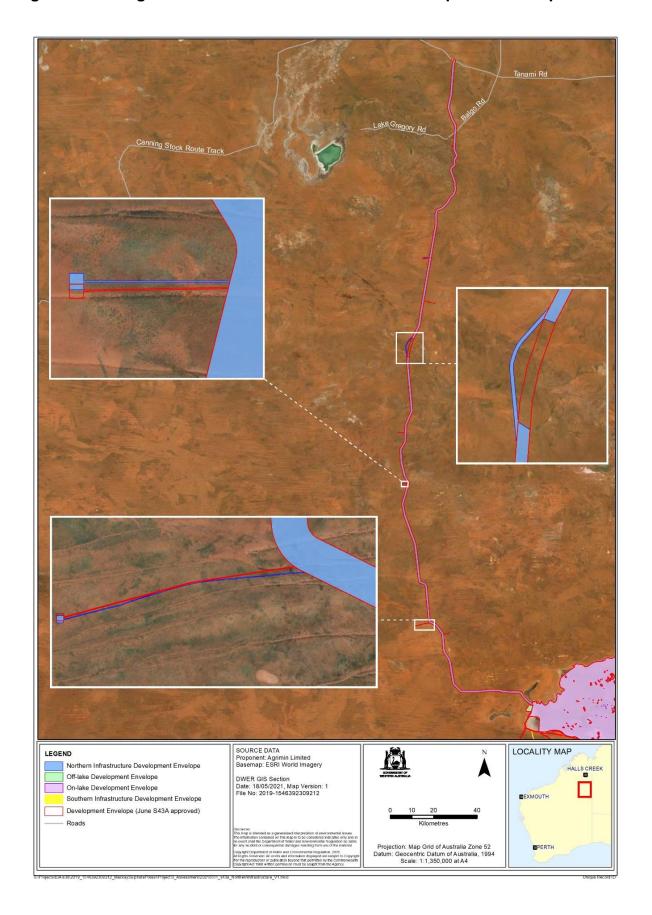
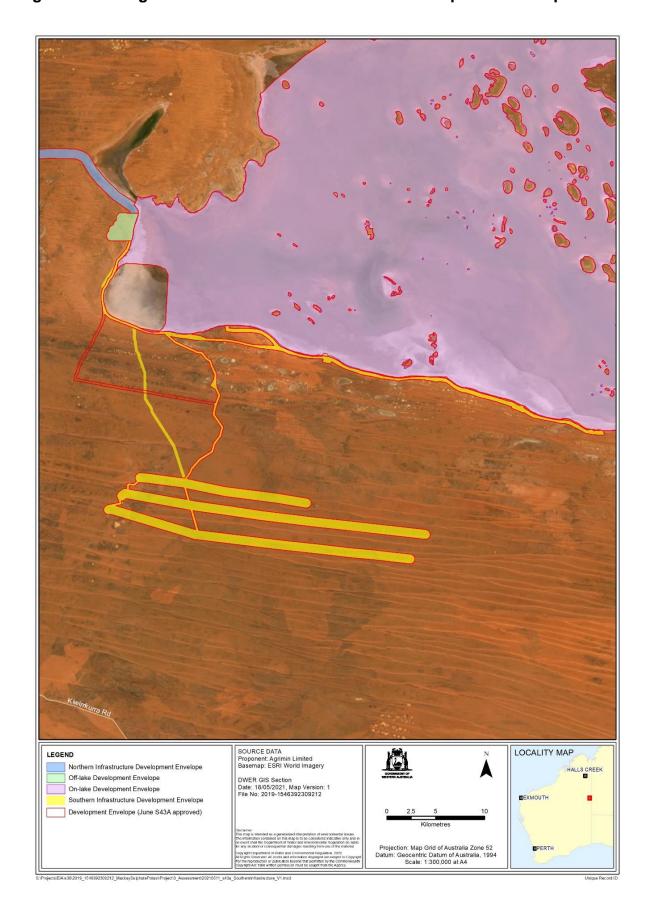


Figure 6 – Changes to the southern infrastructure development envelope



### Schedule 1

## **Change to Proposal**

**Table 1: Summary of the Proposal** 

Proposal title	Mackay Sulphate of Potash Project
Short description	Agrimin Limited proposes to develop a greenfields potash fertiliser operation designed to operate for a 20 year period.
	The Proposal involves the on-lake development of trenches and solar evaporation ponds for brine extraction and SOP production. The off-lake development includes a processing plant, associated site infrastructure and access roads for trucking SOP product to Wyndham Port.
	A northern linear access corridor will include the primary site access road, and potentially a water supply pipeline. A southern infrastructure corridor may be used as an alternate water supply option.

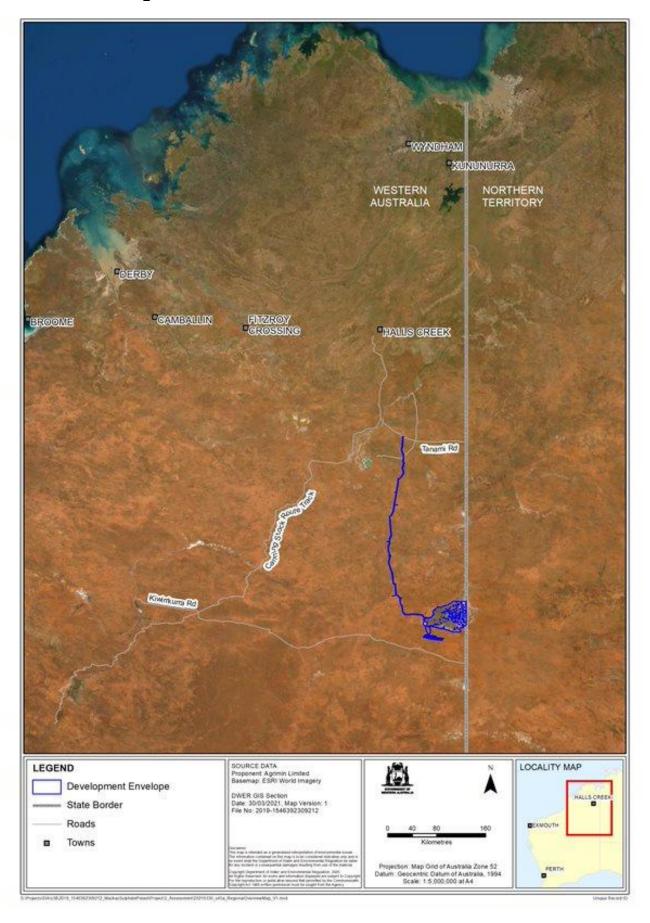
Table 2: Location and proposed

Element	Current Proposal extent (June S43A approved)	Proposed change to the Proposal extent
Physical elements		
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Off-Lake Development Envelope (Off-LDE): Processing infrastructure, access roads, associated project infrastructure (camp, airstrip)	Clearing of no more than 200 ha within the 680 ha Off-lake Development Envelope.	Clearing of no more than 200 ha of native vegetation within the <b>688</b> ha Off-lake Development Envelope.
Northern Infrastructure Development Envelope (NIDE): Haul road	Clearing of no more than 1,000 ha of native vegetation within the 34,486 ha Northern Infrastructure Development Envelope.	Clearing of no more than 1,000 ha of native vegetation within the 33,928 ha Northern Infrastructure Development Envelope.
Southern Infrastructure Development Envelope (SIDE): Access track and water pipeline	Clearing of no more than 300 ha of native vegetation within the 11,829 ha Southern	Clearing of no more than 300 ha of native vegetation within the 11,799 ha Southern

	Infrastructure	Infrastructure
	Development Envelope.	Development Envelope.
Operational elements		
Brine Abstraction	Abstraction of up to 100 GL per annum (GL/a) of hypersaline brine.	No change
Water Abstraction	Abstraction of up to 3.5 GL/a of groundwater for processing.	No change
Water Treatment	Treatment of no more than 3.5 GL/a of water through a reverse osmosis plant.	No change
Waste Salt	Disposal of no more than 18 million tonnes per annum of waste salt to be retained on the lake surface.	No change

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### Attachment 1 - Regional location



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