

Environmental Protection Authority

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 consents to the proponent making the following changes to the proposal during assessment without a revised proposal being referred.

The proposed changes are to:

- Increase the area of off-lake disturbance from 100 hectares (ha) to 200 ha.
- Increase the on-lake Development Envelope from 10,000 ha to 15,000 ha.
- Decrease the Northern Infrastructure Development Envelope from 57,808 ha to 34.486 ha.
- Decrease the Southern Infrastructure Development Envelope 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 5GL/a to no more than 3.5GL/a.
- Decrease water treatment from no more than 5GL/a to no more than 3.5GL/a.

See Figure 1 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 the proposal may have on the environment. Therefore, 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.

Dr Tom Hatton

Delegate of the Environmental Protection Authority

CHAIRMAN

12 June 2020

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.

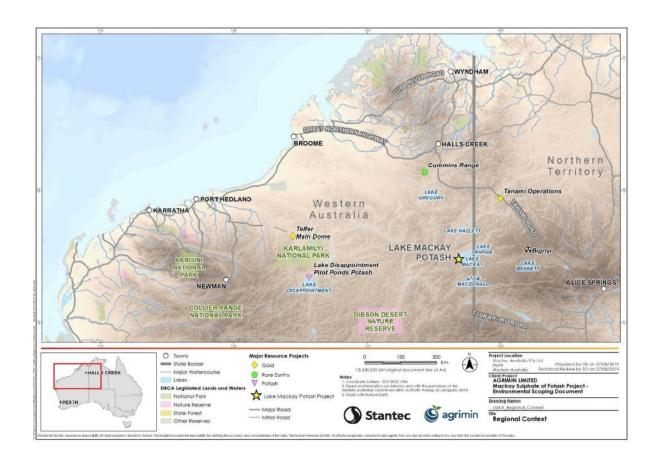
Table 2: Location and proposed

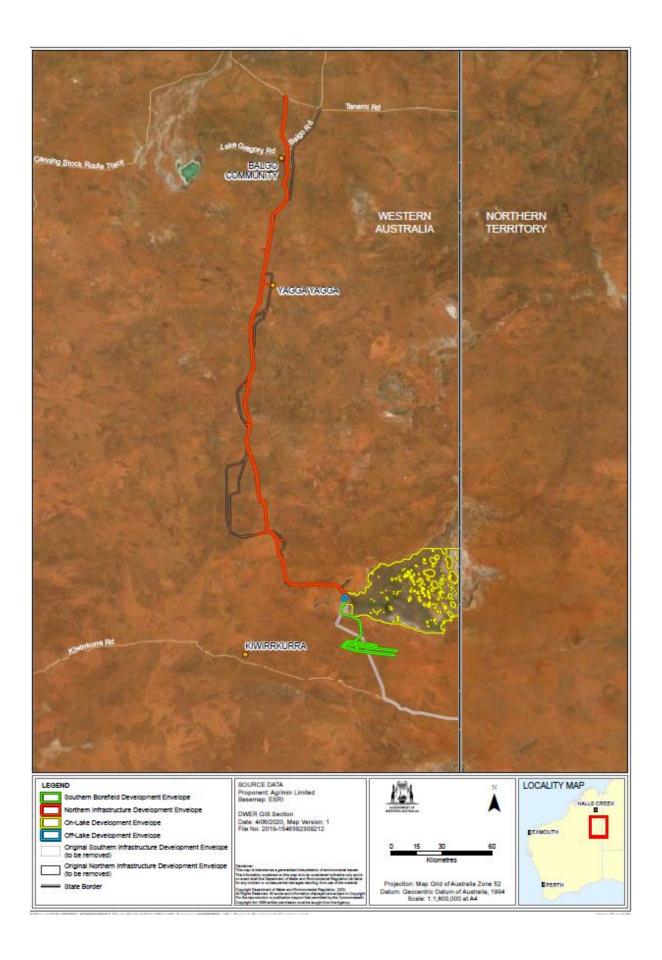
Element	Current proposal extent	Proposed change to the proposal extent	
Physical elements			
On-lake Development Envelope: Brine extraction trenches and evaporation ponds	Disturbance of no more than 10,000 ha within the 218,400 ha On-lake Development Envelope	Clearing of no more than 15,000 ha within the 218,400 ha On-lake Development Envelope	
Off-Lake Development Envelope: Processing infrastructure, access roads, associated project infrastructure (camp, airstrip)	Clearing of no more than 100 ha within the 680 ha Off-lake Development Envelope.	Clearing of no more than 200 ha within the 680 ha Off-lake Development Envelope.	
Northern Infrastructure Development Envelope: Access road and water pipeline.	Clearing of no more than 1,000 ha of native vegetation within the 57,808 ha Northern Infrastructure Development Envelope.	Clearing of no more than 1,000 ha of native vegetation within the 34,486 ha Northern Infrastructure Development Envelope.	
Southern Infrastructure Development Envelope: Potential water pipelines.	Clearing of no more than 300 ha of native vegetation within the 12,300 ha Southern Infrastructure Development Envelope.	Clearing of no more than 300 ha of native vegetation within the 11,829 ha Southern Infrastructure Development Envelope.	

Brine Abstraction	Abstraction of up to 70 GL per annum (GL/a) of hypersaline brine.	•
Water Abstraction	Abstraction of up to 5 GL/a of groundwater for processing.	·
Water Treatment	Treatment of no more than 5 GL/a of water through a reverse osmosis plant.	Treatment of no more than 3.5 GL/a of water through a reverse osmosis plant.
Waste Salt	Disposal of no more than 18 million tonnes per annum of waste salt to be retained on the lake surface.	Disposal of no more than 18 million tonnes per annum of waste salt to be retained on the lake surface.

Attachment 1 – Regional Location Attachment 2 – Changes to development envelopes

Attachment 1 - Regional Location





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 proponent has been refining its proposal and in advance of the EPA preparing a report on the outcome of its assessment of the proposal, 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 2020 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

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. Agrimin Limited's Mackay Sulphate of Potash Proposal Section 43a Request and Supporting Information (2 April 2020).
- 2. EPA guidance and procedures.

Consideration

1. Nature of the proposed change

The changes are designed to allow for an increase in the area of on-lake trenches and evaporation ponds to accommodate for the gradual dilution of dissolved minerals in brine over time, to allow the proposed haul road to minimise floodway crossings in natural watershed areas, and to refine the location of the borefield and access to the on-lake trench network. The proposed changes are:

- Increase the area of off-lake disturbance from 100 hectares (ha) to 200 ha to accommodate for future renewable power infrastructure.
- Increase the on-lake Development Envelope from 10,000 ha to 15,000 ha to access sufficient brine.
- Increase brine abstraction from 70 Giga Litres/annum (GL/a) to 100 GL/a.
- Decrease abstraction of groundwater from no more than 5GL/a to no more than 3.5GL/a
- Decrease water treatment from no more than 5GL/a to no more than 3.5GL/a
- Decrease the Northern Infrastructure Development Envelope from 57,808 ha to 34,486 ha.
- Decrease the Southern Infrastructure Development Envelope from 12,300 ha to 11,829 ha.

2. Stage of the assessment process

The EPA set a level of assessment of Public Environmental Review on 30 January 2019 and is currently considering the Draft Environmental Scoping Document, which was submitted on 5 May 2020. The proposal will be advertised for a 4-week public comment period.

3. <u>Currency, relevance and reliability of the information, including submissions</u>

The information relating to the change is considered reliable and relevant in relation to changes to development envelopes and an increase in the volume of brine abstraction. 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.

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:

a) <u>Values, sensitivity and the quality of the environment which is likely to be impacted</u>

The proposal is in an area with limited historical disturbance. The EPA Chairman's determination identified the preliminary environmental factors for the current proposal as:

- Flora and Vegetation
- Subterranean Fauna
- Terrestrial Fauna
- Inland Waters
- Social Surroundings

The change gives no cause for additional environmental factors to be considered key environmental factors for the purposes of the assessment.

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

The proponent wishes to increase clearing within the Off-Lake Development Envelope from 100 ha to 200 ha. This represents an increase of 100% clearing within the off-lake development envelope.

In addition to this, there is proposed to be an additional 5000 ha of disturbance on the surface of Lake MacKay within a 218,400 ha envelope. This equates to an increase of 2.29% of disturbance within the envelope.

The Proponent is requesting an increase in maximum brine abstraction from 70 GL/a to 100 GL/a. This represents an increase of 42.8%.

In addition to these impacts the proponent is proposing to:

- re-align and reduce the Northern Infrastructure Development Envelope from 57,808 ha to 34,486 ha, a reduction of 23,322 ha (40.3%) (no increase in clearing)
 - re-align and reduce the Southern Infrastructure Development Envelope from 12,300 ha to 11,829 ha, a reduction of 471 ha (3.8%) (no increase in clearing).

The changes will result in a decrease in total area of the development envelopes from 289,188 ha to 265,395 ha, a reduction of 23,793 ha (8.1%), and an increase in total clearing from 11400 ha to 16500 ha (44.7%).

c) Consequence of the likely impacts (or change)

The change to the proposal does not alter the types of impacts associated with the proposal.

The proposed changes to off-lake clearing would result in an increase in the area of clearing that would not be significant given the scale of the landscape and broad scale vegetation units within which it sits. Full assessment of clearing will be undertaken during the assessment process.

Similarly, the proposed changes to on-lake disturbance for trenching equate to a 2.29% increase within a vast development envelope. Full assessment of the hydrological impacts of the trench network will be undertaken during the assessment.

The increase in brine abstraction is unlikely to be significant given the scale of the salt lake, and in any case, the impacts on hydrology will be investigated and fully assessed through the public environmental review.

The changes in the infrastructure development envelopes have the effect of reducing the area of the envelopes and do not increase the area of clearing, however they also amend the location of them. Both of these amendments are designed to reduce the impacts of infrastructure on the environment.

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 any impact that the proposal may have on the environment.**

d) 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.

e) Cumulative impacts with other projects

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

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

The changes do not alter the interactions between parts of the environment that were considered at the referral stage when the level of assessment was set.

g) <u>Level of confidence in the prediction of impacts and the success of proposed</u> mitigation

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

h) 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 overall changes to the proposal are unlikely to significantly increase any impact the proposal may have on the environment primarily because:

- a. The proposed changes do not alter the type of impacts likely to be caused by the proposal and will be considered during the assessment;
- b. The increases in clearing and brine abstraction are relatively small in extent and not considered a significant increase in the broader context of the vast and predominantly uniform desert landscape within which proposal is located:
- c. The overall significance of the increase of these impacts is partiallycounterbalanced by proposed decreases in the extent and impact of other proposal elements such as the reduction of the North and Sound Infrastructure Development Envelopes and in the amount of water abstraction and treatment;

In addition, the changes will be fully assessed as part of the public environmental review as the proposal is currently in the early stages of the environmental impact assessment process

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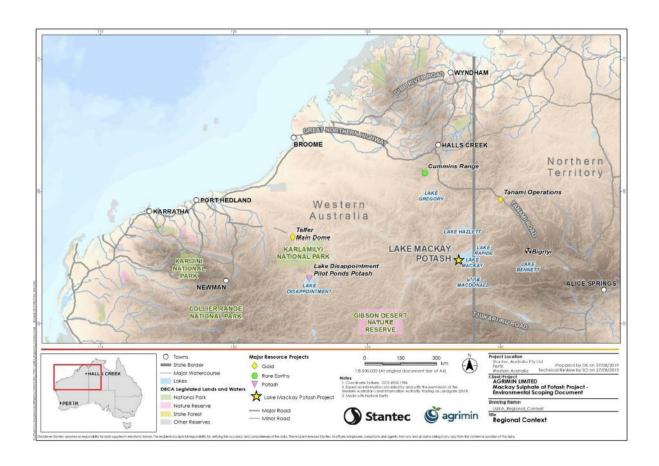
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Attachment 1 - Regional Location



Attachment 2 - Changes to Development Envelopes

