

Cyclone Mineral Sands Project – inquiry under section 46 of the *Environmental Protection Act 1986* to amend Ministerial Statement 1052

Lost Sands Pty Ltd

Inquiry under section 46 of the Environmental Protection Act 1986

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of amending the implementation condition 3 (Time Limit for Proposal Implementation) in Ministerial Statement 1052 relating to the Cyclone Mineral Sands Project.

Section 46(6) of the *Environmental Protection Act 1986* requires the EPA to prepare a report that includes:

- (a) a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be amended
- (b) any other recommendations that it thinks appropriate.

The following is the EPA's report to the Minister pursuant to s. 46(6) of the *Environmental Protection Act 1986*.

Prof. Matthew Tonts

Chair

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1 Proposal

The Cyclone Mineral Sands Project (the proposal) is to develop and operate the Cyclone Mineral Sands Mine, including open cut pits, mining and processing infrastructure, airstrip, accommodation camp, bore fields, and haul road from the mine site to the Forrest Rail siding. The proponent for the proposal is Lost Sands Pty Ltd (a wholly owned subsidiary of Diatreme Resources Limited).

The Environmental Protection Authority (EPA) assessed the proposal at the level of Public Environmental Review and published its report in August 2016 (Report 1575). In this report, the EPA identified the following key environmental factors during the course of its assessment:

- flora and vegetation
- terrestrial fauna.

The EPA also identified the following integrating factors during its assessment:

- rehabilitation and decommissioning
- offsets.

In applying the *Statement of environmental principles, factors, objectives and aims of EIA* (EPA 2023b) these integrating factors are now included within the existing key environmental factors for the proposal.

The EPA concluded in Report 1575, that the proposal may be implemented to meet the EPA's objectives, provided the implementation of the proposal is carried out in accordance with the recommended conditions and procedures.

The then Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement (MS) 1052 on 9 January 2017.

Previously approved amendments to the proposal or conditions

There have been no amendments to the proposal or to the implementation conditions since MS 1052 was issued.

2 Requested amendment to the conditions

Condition 3 of MS 1052 states that the proponent shall not commence implementation of the proposal after five years from the date on the Statement, and any commencement, prior to this date, must be substantial.

The proponent has not yet commenced implementation of the proposal. In October 2021, the proponent requested an amendment to condition 3 of MS 1052 to extend the authorised time limit for substantial commencement of the proposal by five years. The proponent has not proposed any amendments to the proposal or to any other conditions of MS 1052.

In response to the proponent's request, in December 2021, the Minister for Environment requested that the EPA inquire into and report on the matter of amending the implementation conditions relating to condition 3. This report satisfies the requirements of the EPA's inquiry.

3 Inquiry into amending conditions

The EPA typically recommends the Minister for Environment sets conditions on significant proposals that require them to be substantially commenced within a specified timeframe. Extending this timeframe requires the Minister to amend the relevant conditions under s. 46 of the *Environmental Protection Act 1986* and provides for the EPA to review and consider the appropriateness of the implementation conditions relating to the proposal.

The EPA has discretion as to how it conducts this inquiry. In determining the extent and nature of this inquiry, the EPA had regard to information including:

- the currency of its original assessment of the proposal (EPA Report 1575)
- Ministerial Statement 1052
- information provided by the proponent (Diatreme Resources 2021)
- advice from relevant decision-making authorities
- any new information regarding the potential impacts of the proposal on the environment.

In considering whether it was appropriate to recommend an extension of the authorised timeframe for substantial commencement of the proposal, the EPA considered whether, since the publication of Report 1575, there was any change to, or new information relating to, the key environmental factors relevant to the proposal. The EPA also considered whether any new key environmental factors had arisen since its original assessment of the proposal.

In conducting the s. 46 inquiry the EPA also had the opportunity to consider any changes in environmental, scientific or technological knowledge that may have arisen since the initial assessment.

EPA procedures

In conducting this inquiry, the EPA followed the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2021* (State of Western Australia 2021) and the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual* (EPA 2021b).

4 Inquiry findings

The EPA considers that the following are the key environmental factors relevant to the amendment to the conditions:

- flora and vegetation
- terrestrial fauna.

The EPA notes that heritage (social surroundings) was not identified as a key environmental factor at the conclusion of the assessment in Report 1575, and greenhouse gas emissions were not considered in the original assessment. The EPA considers these factors are relevant to the proposed amendment to the implementation conditions, and are discussed in section 4.3 and section 4.4, respectively.

4.1 Flora and vegetation

The EPA environmental objective for flora and vegetation is to protect flora and vegetation so that biological diversity and ecological integrity are maintained.

Conclusions from EPA Report 1575

Mine

- Up to 805 ha of native vegetation would be cleared within the Mine Area Development Envelope.
- The EPA considered that clearing within the Mine Area Development Envelope was unlikely to have a significant impact on flora and vegetation.

Haul road

- Up to 467 ha of native vegetation would be cleared within the Haul Road Development Envelope.
- Up to 306 ha would be within the Great Victoria Desert Nature Reserve, a Class A nature reserve created for the purpose of Conservation of Flora and Fauna in 1970 (EPA 1974).
- The EPA considered that direct impacts to three Priority 3 conservation significant species, Acacia eremophila (numerous nerved variant), Eucalyptus canescens subsp. canescens, and Eucalyptus pimpiniana was not expected to be significant.
- Another seven conservation significant species may be located within the Haul Road Development Envelope.
- Direct impacts to conservation significant flora species would be minimised by identifying suitable habitat through targeted surveys and tagging significant species prior to the commencement of clearing, where possible.
- The EPA considered that, given the direct impact to the Great Victoria Desert Nature Reserve was relatively small (0.012% of the reserve area) and temporary

(haul road would be rehabilitated once mining ceased), the proposal could be managed to prevent long-term impacts to the values of the reserve.

Rehabilitation

- The EPA considered that the preliminary Mine Closure Plan and information in the Public Environmental Review (Lost Sands 2015) was adequate for mining.
- Uncertainty regarding the rehabilitation of the haul road could be addressed through conditions requiring a baseline survey and a rehabilitation and decommissioning plan for the haul road.

Offsets

- The EPA considered that an appropriate offset would include on-ground management actions to improve the environmental values of the reserve.
- The EPA considered that a contribution of 3.6 million dollars to the Department of Biodiversity, Conservation and Attractions (DBCA) following the commencement of operations would be cost effective, relevant and proportionate to the significance of the environmental values being impacted.

Recommended conditions

To manage the impacts, the EPA recommended:

- condition 6 requiring the proponent to plan and conduct a baseline survey to inform the design of, and the completion criteria for, the haul road
- condition 8 requiring the proponent to develop and implement a plan for the design, construction and operation of the haul road, which includes the management of flora and vegetation
- condition 9 requiring the proponent to prepare and implement a rehabilitation and decommissioning plan for the haul road
- condition 10 to counterbalance the significant residual impact to the Great Victoria Desert Nature Reserve.

Assessment of the requested amendment to conditions

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- Environmental factor guideline Flora and vegetation (EPA 2016a)
- WA Environmental Offsets Policy (Government of Western Australia 2011).

Update to flora and vegetation

The proponent's review of the environmental factors relating to the proposal did not find any significant changes to the proposal or environmental setting for flora and vegetation (Diatreme Resources 2021). The proponent has not proposed any additional disturbance to flora and vegetation. No additional or new vegetation/flora surveys have been undertaken since the proposal was approved.

As part of this s. 46 inquiry, the EPA requested the proponent to provide updated information in relation to flora and vegetation on the matters addressed in Report 1575, and to investigate whether there were any new matters that have arisen since the proposal was approved by the Minister for Environment on 9 January 2017.

The original flora and vegetation surveys were undertaken by the proponent within a 134,535 ha Study Area, which included the Mine Area Development Envelope and the Haul Road Development Envelope. The proponent used the following two databases to investigate whether known flora and vegetation values had changed in the original Study Area, or whether there were any new flora and vegetation values that had been recorded since the proposal had been approved:

- 1. Protected Matters Search Tool (PMST) to identify the species listed under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- 2. DBCA Threatened and Priority Flora, Fauna and Ecological Communities Database Search to identify the species listed under the *Biodiversity Conservation Act 2016* (BC Act).

The PMST and the DBCA database search indicated no Threatened or Priority Ecological Communities (TECs/PECs) had been recorded in the Study Area since the proposal had been approved. One new conservation significant flora species has been recorded within the Study Area, *Austrostipa lanata* (Priority 3), following submission of the Public Environmental Review in 2015 (Lost Sands 2015). Table 1 shows the flora values that were considered in Report 1575 and provides an update to these and includes the new listing.

Table 1: Flora species records within Study Area

Flora species	Update
Austrostipa nullanulla, previously unrecorded in WA	Austrostipa vickeryana, Priority 3, misidentified as Austrostipa nullanulla
Eucalyptus vokesensis, unknown status	
Microcorys sp. 1, unknown status – potential new species	Now described as <i>Microcorys</i> sp. Great Victoria Desert (J. Alford s.n. PERTH 09041567), Priority 2.
Eremophila decussata, Priority 1	No change
Dampiera eriantha, Priority 1	Conservation code changed to Priority 2
Eremophila undulata, Priority 2	No change
Acacia eremophila (numerous nerved variant), Priority 3	No change
Eucalyptus canescens subsp. beadellii, Priority 3	No change
Eucalyptus canescens subsp. canescens, Priority 3	No change
Eucalyptus pimpiniana, Priority 3	No change
Lepidium fasciculatum, Priority 3	No change
Austrostipa lanata, Priority 3	New listing

The proponent has advised that the presence of *Austrostipa lanata* will be documented as part of the haul road baseline flora and vegetation survey as required by condition 6 of MS 1052 and will be included in the Flora and Vegetation Management Plan (Stantec 2022).

While the conservation status of the following three priority species has changed since the proposal was approved, the management actions for prevention of impacts to the species would not change, in that these species will be targeted in surveys required under condition 6 of MS 1052:

- Austrostipa vickeryana, Priority 3
- Microcorys sp. Great Victoria Desert (J. Alford s.n. PERTH 09041567), Priority 2
- Dampiera eriantha, Priority 2.

The original Public Environmental Review (Lost Sands 2015) in 2015 indicated that further targeted survey would be undertaken for *Eucalyptus vokesensis*, however, as the species is not listed under State or Federal legislation, the proponent has advised that targeted surveys are no longer proposed for this species (Stantec 2022). While the species is not listed, it is still only known from few records in the area. The EPA notes that *E. vokesensis* is found within the same habitats as P3 species *Acacia eremophila* (numerous nerved variant), *E. canescens* subsp. *beadellii*, *E. canescens* subsp. *canescens* and *E. pimpiniana*. The proponent has stated that targeted surveys of suitable habitat will be undertaken for those species prior to commencement of clearing. This survey would also be able to identify any *E. vokesensis* and should be tagged and avoided wherever possible.

Summary

In considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA considers that there is no new significant or additional information that justifies the reassessment of flora and vegetation for this proposal.

The EPA is therefore satisfied that the following existing conditions and the revised condition 3 for the extension of Time Limit for Proposal Implementation for an additional five years would, when implemented, ensure that the outcome of the proposal would be consistent with the EPA objective for flora and vegetation:

- condition 6: Haul road baseline flora and vegetation survey and road design and alignment
- condition 7: Management-based Condition Environmental Management Plans
- condition 8: Haul road design, construction, maintenance and operation
- condition 9: Rehabilitation of the haul road within the Great Victoria Desert Nature Reserve
- condition 10: Offsets.

4.2 Terrestrial fauna

The EPA environmental objective for terrestrial fauna is to protect terrestrial fauna so that biological diversity and ecological integrity are maintained.

Conclusions from EPA Report 1575

Mine

- Conservation significant species were identified in the Mine Area Development Envelope:
 - brush-tailed mulgara (Dasycercus blythi), Priority 4
 - o southern marsupial mole (Notoryctes typhlops), Priority 4
 - o rainbow bee-eater (*Merops ornatus*), migratory and protected under international agreements.
- The EPA considered that loss of two habitat types associated with the mine was unlikely to significantly impact any conservation significant fauna species as fauna habitat was widespread throughout the study area.

Haul road

- Seven conservation significant species were recorded in the vicinity of the proposed haul road; including:
 - o maleefowl (Leipoa ocellata), Vulnerable
 - o great desert skink (*Liopholis kintorei*), Vulnerable
 - o peregrine falcon (Falco peregrinus), Other specially protected fauna
 - woma (Aspidites ramsayi; southwest subpopulation), Priority 1
 - o southern marsupial mole (*Notoryctes typhlops*), Priority 4
 - o princess parrot; (Polytelis alexandrae), Priority 4
 - naretha blue bonnet (Northiella haematogaster narethae), Priority 4.
- The EPA considered that potential for direct loss of individual fauna during construction of the haul road could affect conservation significant species that occur within the vicinity of the haul road.
- The EPA noted that the haul road would bisect the Great Victoria Desert Nature Reserve; however, a significant impact to fragmentation of habitat was unlikely due to the size of the areas west and east of the proposed haul road.
- The EPA noted that there was insufficient detail regarding the proposed design and management actions to assess whether impacts to terrestrial fauna associated with the haul road could be managed to have a minimal impact on the values of the Great Victoria Desert Nature Reserve.
- The EPA recommended a condition requiring the proponent to develop a plan for the design, construction and operation of the haul road on advice from DBCA prior to the commencement of ground disturbing activities.

 The EPA considered that loss of terrestrial fauna habitat was a significant residual impact and would require an offset.

Offset

- The EPA considered that an appropriate offset would include on-ground management actions to improve the environmental values of the reserve.
- The EPA considered that a contribution of 3.6 million dollars to the DBCA following the commencement of operations would be cost effective, relevant and proportionate to the significance of the environmental values being impacted.

Recommended conditions

To manage these impacts, the EPA recommended the following conditions:

- condition 8 requiring the proponent to develop and implement a plan for the design, construction and operation of the haul road, which includes the management of terrestrial fauna
- condition 10 to counterbalance the significant residual impact to the Great Victoria Desert Nature Reserve.

Assessment of the requested amendment to conditions

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- Environmental factor guideline Terrestrial fauna (EPA 2016b)
- WA Environmental Offsets Policy (Government of Western Australia 2011).

Update to terrestrial fauna

The proponent's review of the environmental factors relating to the proposal did not find any significant changes to the proposal or environmental setting for terrestrial fauna (Diatreme Resources 2021). The proponent has not proposed any additional disturbance to terrestrial fauna habitat. No additional or new fauna surveys have been undertaken since the proposal was approved.

As part of this s. 46 inquiry, the EPA requested the proponent to provide updated information in relation to terrestrial fauna on the matters addressed in Report 1575, and to investigate whether there were any new matters that have arisen since the proposal was approved by the Minister for Environment on 9 January 2017.

The proponent used the PMST and DBCA database search as described in section 4.1 to investigate whether known terrestrial fauna values had changed or whether there were any new terrestrial fauna values that had been recorded in the Study Area since the proposal had been approved. One new conservation significant fauna species has been recorded within the Study Area, the Southern death adder (*Acanthophis antarcticus*) Priority 3, following submission of the Public Environmental Review in 2015 (Lost Sands 2015). Table 2 shows the fauna values that were considered in the Public Environmental Review and Report 1575 and provides an update to these and includes the new listing.

Table 2: Fauna species records within Study Area

Former amounts	Hadata
Fauna species	Update
Southern marsupial mole (Notoryctes	Not listed under the EPBC Act
typhlops), Endangered	
	Conservation code changed to Priority 4
Malloofowl (Lainea applica)	under the BC Act
Malleefowl (<i>Leipoa ocellata</i>), Vulnerable	No change
Great desert skink (<i>Liopholis</i>	No change
kintorei), Vulnerable	140 Grange
Grey falcon (Falco hypoleucos),	Listed as Vulnerable under the EPBC Act
Schedule 1	
	Conservation code changed from
	Schedule 1 to Vulnerable under the BC
	Act
Princess parrot (<i>Polytelis</i>	No change
alexandrae), Vulnerable, Priority 4	
Woma (Aspidites ramsayi; southwest	No change
subpop.), Priority One	0
Peregrine falcon (<i>Falco peregrinus</i>), Schedule 4	Conservation code changed to 'Other
Scriedule 4	specially protected species' under the BC Act
Major Mitchell's cockatoo	Not listed
(Lophochroa leadbeateri),	TVOT HOLOG
Schedule 4	
Naretha blue bonnet (Northiella.	Conservation code changed to Priority 4
haematogaster narethae),	under the BC Act as naretha blue bonnet
Schedule 4	(Northiella narethae)
Brush-tailed mulgara (Dasycercus	No change
blythi), Priority 4	
Striated grasswren (<i>Amytornis</i>	No change
striatus striatus), Priority 4	Not listed
Bush stone-curlew (<i>Burhinus</i>	Not listed
grallarius), Priority 4 Nullarbor quail-thrush (Cinclosoma	Not listed
cinnamomeum alisteri), Priority 4	140t listed
Australian bustard (<i>Ardeotis</i>	Not listed
australis), Priority 4	
Southern crested bellbird (<i>Oreoica</i>	Not listed
gutturalis gutturalis), Priority 4	
Rainbow bee-eater (Merops ornatus),	Not listed
Schedule 3	
Southern death adder (Acanthophis	New listing
antarcticus) Priority 3	

Since the proposal has been approved, the grey falcon (*Falco hypoleucos*) was listed as Vulnerable under the EPBC Act, and has had its listing under the BC Act changed from Schedule 1 to Vulnerable. The Public Environmental Review (Lost Sands 2015) advised that the grey falcon was considered to possibly occur in the development envelopes and, as the species was highly mobile and likely to forage throughout the region, it was unlikely to rely solely on the habitats within disturbance envelopes. While the conservation status of the grey falcon has changed since the proposal was approved, the management for the species should be included within the current proposed management in the conditions of MS 1052.

The southern death adder (*Acanthophis antarcticus*) was recorded within the Study Area following submission of the Public Environmental Review (Lost Sands 2015). As stated in the Public Environmental Review (Lost Sands 2015), if evidence of a resident population of significant species was detected, the proponent would develop a Significant Species Management Plan for the species to supplement the Project's Fauna Management Plan.

The conservation status of the southern marsupial mole (*Notoryctes typhlops*), peregrine falcon (*Falco peregrinus*) and the naretha blue bonnet (*Northiella narethae*) has changed (downgraded) since the proposal was approved; however, the proposed management actions for prevention of impacts to the species would not change. These three species will still be considered in the plans required under condition 8 of MS 1052.

Summary

In considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA considers that there is no new significant or additional information that justifies the reassessment of terrestrial fauna for this proposal.

The EPA is therefore satisfied that the following existing conditions and the revised condition 3 for the extension of Time Limit for Proposal Implementation for an additional five years would, when implemented, ensure that the outcome of the proposal would be consistent with the EPA objective for terrestrial fauna:

- condition 6: Haul road baseline flora and vegetation survey and road design and alignment
- condition 7: Management-based Condition Environmental Management Plans
- condition 8: Haul road design, construction, maintenance and operation
- condition 9: Rehabilitation of the haul road within the Great Victoria Desert Nature Reserve
- condition 10: Offsets.

4.3 Other environmental factor - Social surroundings

Report 1575 identified that 'heritage' was not a key environmental factor; however, the EPA considered review of Aboriginal heritage matters was required as part of this inquiry. In applying the *Statement of environmental principles, factors and objectives and aims of EIA* (EPA 2023b) this factor is now described as 'social surroundings'.

The EPA environmental objective for social surroundings is to *protect social surroundings from significant harm*.

Conclusions from Report 1575

Heritage was identified as a preliminary key environmental factor in the Environmental Scoping Document; however, the EPA did not identify heritage as a key environmental factor at the conclusion of its assessment because it was unlikely that the proposal would have a significant impact on heritage values, and the proposal could meet the objectives for the factor as:

- no sites of significant heritage value had been identified in the Mine Area Development Envelope
- the proposed haul road route was developed in consultation with Traditional Owners in the area, and was the preferred route of the Traditional Owners of the area
- the haul road was not expected to impact any areas of cultural significance.

The EPA noted that the proponent had signed the Cyclone Zircon Project Native Title and Mining Agreement with the Pila Nguru Aboriginal Corporation representing the Spinifex People, the Traditional Owners of the land containing the proposal. The EPA also noted that any heritage sites or artefacts identified during the construction of the mine could be managed under the *Aboriginal Heritage Act 1972*.

Assessment of the requested amendment

The EPA considers that the following current environmental guidance is relevant to its assessment of the proposal for this factor:

Environmental factor guideline – Social surroundings (EPA 2016c).

Update to social surroundings

The proponent's review of the environmental factors relating to the proposal did not find any significant changes to the proposal or environmental setting for social surroundings (Diatreme Resources 2021). The proponent has not proposed changes to the proposal that would change the extent of the disturbance area or location of activities.

No sites of significant heritage value have been identified in the Mine Area Development Envelope. Three clay pans, which may have some cultural significance, are located to the west and east of the proposed haul road but are not expected to be impacted by the proposal.

The proponent has advised that it is aware of its obligations and has consulted extensively with the Traditional Owners in regard to management of Aboriginal heritage.

The proponent has also advised that a Cultural Heritage Management Plan has been prepared aimed at protecting the cultural heritage of the project area from any impacts relating to construction or mining activities, and to foster a positive working relationship with the Traditional Owners. The plan presents management measures that will be implemented to prevent impacts to Aboriginal heritage sites and to further document Aboriginal heritage in the area.

The Department of Planning, Lands and Heritage (DPLH) advised on 1 August 2022 that there have been no new Aboriginal heritage sites lodged or registered under the *Aboriginal Heritage Act 1972* since the previous work was undertaken for the project.

Summary

In considering the information provided by the proponent, from DMAs, and relevant EPA policies and guidelines, the EPA considers that there is no new significant or additional information that justifies further assessment of social surroundings for this proposal.

The EPA is therefore satisfied that the revised condition 3 for the extension of Time Limit for Proposal Implementation for an additional five years would, when implemented, ensure that the outcome of the proposal would not be inconsistent with the EPA objective for social surroundings.

4.4 Other environmental factor – Greenhouse gas emissions

Greenhouse gas (GHG) emissions were not considered during the EPA's assessment of the original proposal. However, in considering the *Environmental factor guideline – Greenhouse gas emissions* (EPA 2023a), the proponent has undertaken calculations to estimate the emissions that may occur as a result of implementing the proposal (Diatreme Resources 2021). The EPA environmental objective for GHG is *to minimise the risk of environmental harm associated with climate change by reducing greenhouse gas emissions as far as practicable*.

Assessment of the requested amendment

The EPA considers that the following current environmental guidance is relevant to its assessment of the proposal for this factor:

Environmental factor guideline – Greenhouse gas emissions (EPA 2023a).

New information considered

The proponent has not proposed changes to the proposal that would change the extent of the development area or timeframe of implementation activities. Report 1575 states that the expected life of the proposal (operations) is ten years.

Construction is expected to take one year and the estimated GHG emissions during construction is 68,139 tonnes of CO₂-e (tCO₂-e) and the estimated GHG emissions during operations is 40,752 tCO₂-e per year. Both construction and operational periods will result in total scope 1 emissions of well below the annual 100,000 tCO₂-e criterion for scope 1 emissions.

Summary

In considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA considers that there is no new significant or additional information that justifies the assessment of greenhouse gas emissions for this proposal.

The EPA is therefore satisfied that the revised condition 3 for the extension of Time Limit for Proposal Implementation for an additional five years would, when implemented, ensure that the outcome of the proposal would not be inconsistent with the EPA objective for GHG emissions.

5 Conclusions and recommendations

Amendment to condition 3

The proponent has requested an amendment to condition 3 to extend the Time Limit for Proposal Implementation. The EPA considers it is appropriate to amend condition 3 and extend the time limit for proposal implementation by five years from the publication date of the Ministerial Statement resulting from this report.

Conclusions

In relation to the environmental factors, and considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA concludes that:

- there are no amendments to the proposal associated with the request to amend the conditions
- there is no significant new or additional information that changes the conclusions reached by the EPA under any of the relevant environmental factors since the proposal was assessed by the EPA in Report 1575 (August 2016)
- no new significant environmental factors have arisen since the EPA's original assessment of the proposal
- impacts to the key environmental factors are considered manageable, based on the requirements of the original conditions retained in MS 1052
- the authorised timeframe for substantial commencement of the proposal may be extended by five years as requested.

Recommendations

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment under s. 46 of the *Environmental Protection Act 1986*:

- 1. While retaining the environmental requirements of the original conditions of MS 1052, it is appropriate to delete condition 3 and replace it with a new implementation condition extending the authorised timeframe for substantial commencements of the proposal by five years.
- 2. After complying with s. 46(8) of the *Environmental Protection Act 1986*, the Minister may issue a statement of decision to amend condition 3 of MS 1052 in the manner provided for in the attached recommended statement (Appendix A).

Appendix A: Recommended conditions

STATEMENT TO AMEND THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL

(Section 46 of the Environmental Protection Act 1986)

CYCLONE MINERAL SANDS PROJECT

Proposal: Develop and operate the Cyclone Mineral Sands Mine,

including open cut pits, mining and processing infrastructure, airstrip, accommodation camp, bore fields, and haul road from the mine site to the Forrest rail siding.

Proponent: Lost Sands Pty Ltd (Wholly owned subsidiary of

Diatreme Resources Limited)

Australian Company Number 101 269 747

Proponent Address: Unit 8, 55-61 Holdsworth Street

COORPAROO, QLD 4151

Report of the Environmental Protection Authority: 1744

Preceding Statement/s Relating to this Proposal: 1052

Pursuant to section 45 of the *Environmental Protection Act 1986*, as applied by section 46(8), it has been agreed that the implementation conditions set out in Ministerial Statement No. 1052, be amended as specified in this Statement.

Condition 3 of Ministerial Statement 1052 is deleted and replaced with:

3 Time Limit for Proposal Implementation

- 3-1 The proposal must be substantially commenced within five (5) years from the date of this Statement.
- 3-2 The proponent must provide to the **CEO** documentary evidence demonstrating that they have complied with condition 3-1 no later than fourteen (14) days after the expiration of period specified in condition 3-1.
- 3-3 If the proposal has not been substantially commenced within the period specified in condition 3-1, implementation of the proposal must not be commenced or continued after the expiration of that period.

Appendix B: Decision-making authorities

The decision-making authorities in the table below have been identified for the purposes of s. 45 as applied by s. 46(8) of the *Environmental Protection Act 1986*.

Decision-making authority	Legislation (and approval)
Minister for Aboriginal Affair	S Aboriginal Heritage Act 1972 (Section 18 consent to impact a registered Aboriginal heritage site) Aboriginal Cultural Heritage Act 2021
2. Minister for Environment	Biodiversity Conservation Act 2016 (Take or disturb threatened species)
Minister for Mines and Petroleum	Mining Act 1978 (Granting of a mining lease/exploration licence/general purpose lease/retention licence)
4. Minister for Water	Rights in Water and Irrigation Act 1914 (Groundwater abstraction licence, permit to interfere with bed and banks)
5. Minister for Transport	Main Roads Act 1930 (Section 22 Approval for Commissioner to construct roads)
6. Chief Executive Officer Department of Biodiversity, Conservation and Attraction	Biodiversity Conservation Act 2016 (Authority to take flora and fauna (other than threatened species)) Conservation and Land Management Act 1984 (Permit/lease/licence in respect of State forests, timber reserves, national parks, conservation parks, nature reserves, marine nature reserves, marine parks, marine management areas and land vested in Conservation and Parks Commission)
7. Chief Health Officer Department of Health	Health Act 1911 Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulation 1974 (Treatment of sewage intended to serve a building that is not a single dwelling or any other building that produces more than 540 litres of sewage per day)

Decision-making authority	Legislation (and approval)
8. Chief Dangerous Goods Officer Department of Mines, Industry Regulation and Safety	Dangerous Goods Safety Act 2004 (Storage and handling of dangerous goods)
9. Executive Director, Resource and Environmental Compliance Department of Mines, Industry Regulation and Safety	Mining Act 1978 (Mining proposal)
10. Mining Registrar Department of Mines, Industry Regulation and Safety	Mining Act 1978 (Miscellaneous license / prospecting licence)
11.State Mining Engineer Department of Mines, Industry Regulation and Safety	Mines Safety and Inspection Act 1994 (Mine safety / s. 42(3)a approval to commence mining operations)
12.Chief Executive Officer, Department of Water and Environmental Regulation	Environmental Protection Act 1986 (Works approval and licence)
13. Secretary, Radiological Council	Radiation Safety Act 1975 (Permit to mine radioactive materials / permit to transport radioactive materials)
14. Chief Executive Officer, Shire of Laverton	Building Act 2011 (Building permit)
15. Chief Executive Officer, Shire of Menzies	
16.Chief Executive Officer, City of Kalgoorlie-Boulder	

Note: In this instance, agreement is only required with DMAs 1 to 5 since these DMAs are Ministers.

References

Diatreme Resources 2021, Lost Sands Pty Ltd – Ministerial Statement 1052 Cyclone Mineral Sands Project–Section 46 Change to Condition Request, prepared by Diatreme Resources Limited (ABN 33 061 267 061), 6 October 2021 (Record number: DWERDT512587).

EPA 1974, Conservation Reserves in Western Australia: Report of the Conservation through Reserves Committee to the Environmental Protection Authority 1974, Environmental Protection Authority, 1974.

EPA 2016a, *Environmental factor guideline – Flora and vegetation*, Environmental Protection Authority, Perth, WA.

EPA 2016b, *Environmental factor guideline – Terrestrial fauna*, Environmental Protection Authority, Perth, WA.

EPA 2016c, *Environmental factor guideline – Social surroundings*, Environmental Protection Authority, Perth, WA.

EPA 2021b, Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual, Environmental Protection Authority, Perth, WA.

EPA 2023a, *Environmental factor guideline – Greenhouse gas emissions*, Environmental Protection Authority, Perth, WA.

EPA 2023b, Statement of environmental principles, factors, objectives and aims of *EIA*, Environmental Protection Authority, Perth, WA.

Government of Western Australia 2011, *WA Environmental Offsets Policy*, Government of Western Australia, Perth WA

Lost Sands 2015, Cyclone Mineral Sands Project - Public Environmental Review, Prepared by Lost Sands Pty Ltd Wholly Owned Subsidiary of Diatreme Resources Limited, 29 June 2015, available at

https://www.epa.wa.gov.au/sites/default/files/PER_documentation/Cyclone%20Mineral%20Sands%20Project%20PER.pdf (Record number: WRD288163)

Stantec 2022, Attachment 2 Response to EPA Request for Further Information Cyclone Mineral Sands Project Section 46 Change of Condition – Ministerial Statement 1052, prepared for Lost Sands Pty Ltd, July 2022

State of Western Australia 2021, Western Australia Government Gazette, No. 180, Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2021, 22 October 2021.