

ASX Release
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RareX finalises key baseline studies to support permitting at Cummins Range

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Highlights

- All critical environmental baseline studies have now been completed for the Cummins Range Rare Earth and Phosphate Project.
- Baseline completion is a key milestone to finalise project approvals, with the next steps including securing a Heritage Agreement and completing a Pre-Feasibility Study (PFS).
- No unexpected environmental findings within the baseline surveys, with all aspects manageable with typical operational plans.
- Mining Heritage Agreement now nearing completion following leadership and advisory changes within the Jaru Prescribed Body Corporate (PBC).
- Main focus at Cummins Range is now on securing product off-take agreements, which represents a critical component of the PFS.

RareX Limited (ASX: REE – **RareX or the Company**) is pleased to announce the completion of environmental baseline studies for its 100%-owned Cummins Range Rare Earths & Phosphate Project in the Kimberley region of Western Australia, representing one of the key pre-requisites to complete project approvals.

RareX CEO, James Durrant, said: *“The results of this extensive, year-long survey were in line with expectations, with all the Project’s environmental aspects able to be successfully managed via standard operational plans. The completion of these surveys paves the way for RareX to formally engage with the regulators to progress the next phase of regulatory approvals for Cummins Range.”*

Summary

RareX, with support from its environmental consultants, including MBS Environmental and Rapallo Environmental, has completed their key environmental baseline work needed for meaningful engagement with the environmental permitting agencies.

The received reports cover environmental aspects including:

- Flora
- Fauna
- Subterranean Fauna
- Ground and Surface Water
- Soils and Landforms
- Mine Rock Chemistry and Mineralogy

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The reports provide a description of the above environmental factors, associated risks in the context of a mining project being developed, and proposed strategies to mitigate impacts to observed environmental receptors.

No unusual or unexpected observations were made against initial desktop assessments and all observed risk factors have precedent mitigation strategies applied in the industry.

The project is located well away (>10km) from any reserves or other key receptors and is nestled amongst large regional landforms that extend well beyond the project area and as such provide plenty of continuous habitat for existing species to use during and after mining operations (see Figure 1).

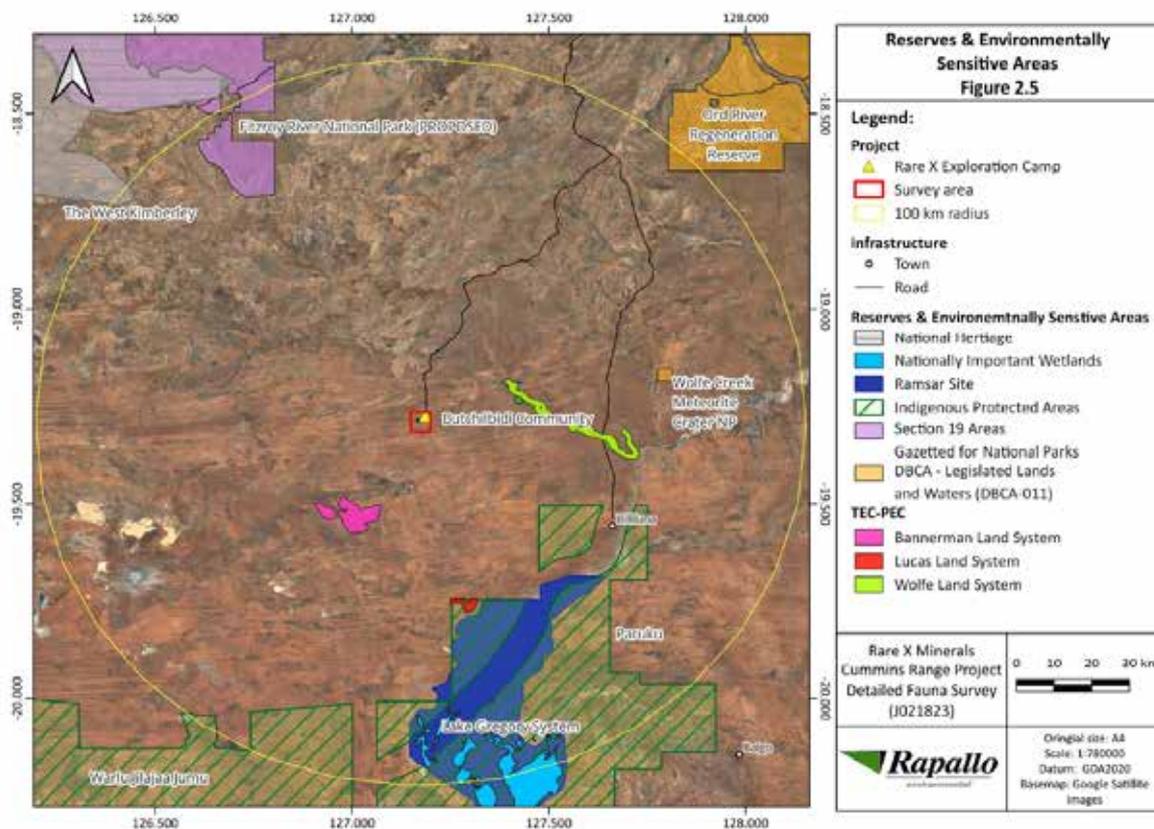


Figure 1: Map of nature reserves and other protected areas in the region with a 100km radius marked. Commonly a distance of more than 10km is used to determine if a project has a direct impact on these protected areas. Note the Butchibilidi community is abandoned and is approximately 25km from the proposed mine site.

Flora

Both spring and autumn surveys were completed throughout 2022 and 2023, as is the core requirement to establish a baseline dataset. The Flora and Fauna surveys were both undertaken at the same time.

Three landform types were identified in the disturbance area and surrounds: sandplains, dunes and clay pans. The vegetation types of the sandplain and dune group fit well within the regional context, and as such, habitats and flora species extend well beyond the project areas within those landforms in this region.

The clay pan is associated with the carbonatite pipe itself and, given the higher amount of nutrients related to the phosphate-bearing rock substrate, has a higher plant diversity than the surrounding areas. As the minable portion

of the pipe is less than half of the clay pan extent, RareX has been advised that this landform and associated flora can be managed with appropriate management plans and offsets as required. Some additional mapping and sampling of flora is recommended at this stage.



Figure 1: Overview of identified landforms and associated flora as mapped by Rapallo.

Fauna

In line with the desktop assessments, commonly expected species of small mammals and reptiles have been identified in the area. Given the small footprint of the site in the regional context and associated habitat extents, the project impact is very manageable.

Recommendations related to the protection of endemic species focused on the management of invasive predatory species (e.g. foxes and cats) which were observed in the area during the field surveys. For individual species, dedicated management plans may be required.

Subterranean Fauna

No subterranean fauna was identified during a field campaign in September 2023. Geological conditions were not seen as supportive of subterranean fauna as part of the initial assessment in line with field observations.

As part of ongoing work, occasional sampling when opportune will continue to build more substantive datasets and due diligence.

Ground and Surface Water

Following installation of monitoring bores within and outside the deposit in 2022, RareX conducted a comprehensive data collection campaign to characterise groundwater chemistry. Data loggers collected water level data from the bores and a weather station provided key data around wind and rainfall conditions throughout the year.

Combined, the information provides key inputs to the site's future water balance and potential impacts to the environment depending on how surplus water from the mine may be disposed of.

Hydrochemistry is of particular interest as it outlines how far the groundwater of this region is a useful resource (e.g. human or livestock consumption) or if the water could impact other potential receptors within the region. The water is generally of livestock quality, with the exception of elevated fluoride, as is expected given the nature of the carbonatite, which contains minerals such as fluorapatite. Country rock outside of the deposit is less affected by fluoride concentrations.

For potable and processing water use, it is anticipated that a level of water filtration and treatment will be required to support a camp and plant operations and, as discussed under the Mine Rock Characterisation section, ROM and ore stockpiles will manage runoff in a way that directs water to an evaporation pond so as to mitigate fluoride and phosphate release to the environment. It is probable that a certain amount of surplus water will need to be managed, which has been considered as part of prior studies by allowing for an evaporation pond as part of the operational designs.

Pre-operational data collection with a reduced and more targeted analytical suite is being undertaken on a quarterly basis, and will continue in parallel with the project's existing development pathway.

Soils & Landforms

Three landform types were identified in the disturbance area and surrounds: sandplains, dunes and clay pans.

Sandplains were the dominant landform both within the project area and regionally. The project area contains two small, low dunes; however dunes are relatively common regionally south of the project area. The clay pan is associated with the intrusive pipe that hosts the rare earth deposit and is less common regionally.

Based on both the desktop and field assessments, it appears unlikely that disturbances associated with the project will significantly affect any of the identified landforms at the regional scale.

Soils in the project area typically contain very low concentrations of exchangeable cations and also have low ESP values. This means that project area soils are likely to have a poor nutrient holding capacity but are also highly unlikely to be sodic and therefore are unlikely to be prone to erosion.



Figure 2: Example of a soil profile of the red sandy earth type

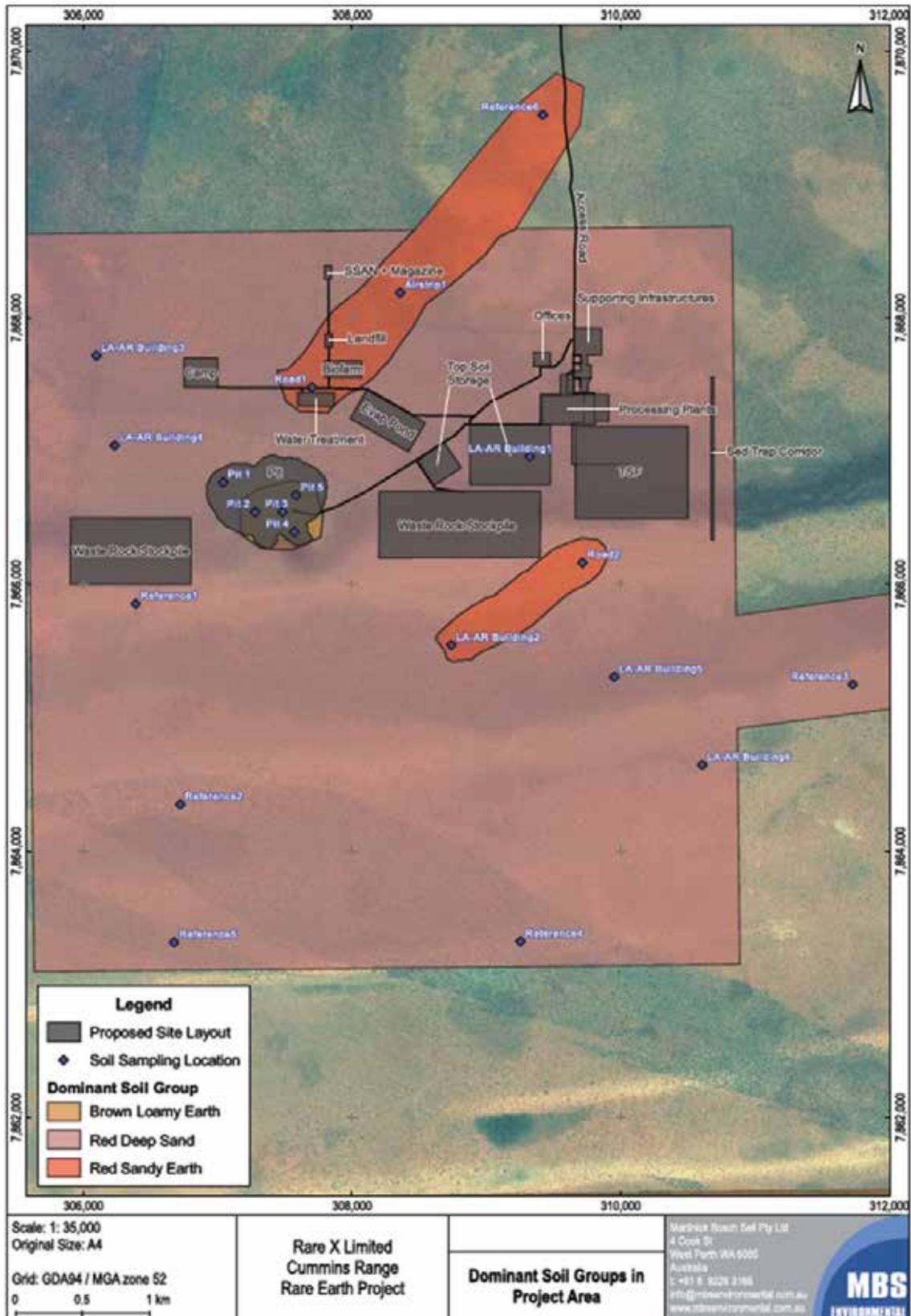


Figure 3: Map of dominant soil types of which there are three. Red Deep Sand dominates the area outside of the deposit.

Mine Rock Chemistry and Mineralogy

Mine rock chemistry assessments, or waste rock characterisations, cover a broad range of human health and environmental considerations. This ranges from formation of acids from sulphides to the presence of radionuclides or asbestiform fibres.

Acid forming potential

No rocks tested have been classed as acid forming. The high neutralisation potential of the carbonatite and pyroxenite rock types negates any presence of measured sulphur and its associated acid forming potential.

Metalloids and other elements

Of particular interest are elements that could feasibly be leached through exposure to rain whilst stored on a waste dump at site.

Most material types were enriched in Niobium, Tantalum and Cerium and Strontium. Enrichment in titanium was noted for fresh glimmerite and phoscorite waste samples associated to the titanium oxide detected in the mineralogical compositions.

The low-grade and high grade ore and materials were highly enriched in phosphorus, also expected since phosphate is a potential ore phase within the Cummins Range carbonatite.

Concentrations of most metals and metalloids analysed were close or below their respective limit of reporting in water leachates (simulating waste dump run-off), indicating a very low risk of metalliferous drainage. Fluoride was present in the leachate, same as in the ground water associated with the deposit and was the only element that exceeded livestock guidelines for water quality.

To manage groundwater risk, it is recommended to handle ores in a way that run-off is collected in a sump and the respective water evaporated. Using carbonatite material that has also acid neutralising capability is the preferred method for underpinning ore stockpiles and the ROM.

Radionuclides

Levels of naturally occurring radiation concentrations for all the waste samples analysed were below the 1 Bq/g exemption limit as 'inherently safe' except for uranium in carbonatite sample XCR00530 (96 to 100 mbgl, 1.15 Bq/g) which was identified as mineralised waste and a mineralised 'ferricrete'. Up to 10Bq/g is material that requires some consideration prior to transport, but risks to the human health or the environment are low. This will become relevant when transporting concentrates, albeit it is not expected that transport limitations will be exceeded for the Cummins Range concentrate.

Non-mineralised waste types are considered below the levels requiring management of NORM and do not require specific management other than for physical properties, whilst mineralised waste may require a management plan to ensure that this material is encapsulated within the waste dump.

Overburden shallow waste of aeolian sands, silts and clays to a depth of approximately 8 metres depth appears suitable for use in rehabilitation as regrowth media although placement on a slope will require suitable rock armouring to prevent erosion.

Asbestiform minerals

A carbonatite waste rock sample had a distinct veinlet of fibrous material present, which was identified as asbestiform anthophyllite. The overall quantities noted in the waste rock samples are very low and as such no particular treatment of waste rock is warranted at this point, however a fibrous materials management plan will be developed and implemented to ensure appropriate risk management and ongoing data collection.

Next steps

The environmental information collected and reported upon is sufficient to develop a project description that can be used to formally engage the regulators (EPA, DWER, DEMIRS) for a preliminary discussion of the project before submitting either a referral under Part IV of the EP Act or for progressing directly to permitting upon completion of a Definitive Feasibility Study (DFS).

The following key milestones are required to complete the project descriptions sufficient to engage the regulator and firm-up the pathway to approvals:

1. Signing of the mining Heritage Agreement – Following a change in the native title governance structure and legal representative, discussions have now resumed with the Jaru PBC, with the long-form final draft agreement under consideration.
2. Completion of the project's Pre-Feasibility Study – Currently progressed to the requisite level, with offtake being the final catalyst to close this level of study. Early definition of offtake is important for speciality products and RareX is progressing with product generation in support of engaging with down-stream refiners of rare earths and phosphates.

It is anticipated that once approval engagement has formally been initiated with the regulators, and with consideration for the scale and nature of the Cummins Range Project, permitting can be completed within 12 months.

This announcement has been authorised for release by the Board of the Company.

About RareX Limited – ASX: REE

RareX Limited (ASX: REE), a Perth based project development and exploration Company, was founded on the fundamental belief of the electronics revolution and the electric vehicle mega-trend. Our focus is rare earths and associated battery and electronic metals.

Cummins Range, in the East Kimberley region of Western Australia, is our flagship project which aims to produce a sustainable, ethical, transparent and secure low carbon rare earth and phosphate supply chain solution for its products which satisfy the two global mega-trends of population growth and electrification.

RareX maintains exploration upside programs in the immediate vicinity of the Cummins Range Project and also more broadly to identify targets and progress projects complementary to the founding beliefs and expertise of the core team.

Rare earths and in particular, NdPr, are core enablers of decarbonisation and electrification of our society. NdPr supports high strength magnets which enables low carbon technologies, especially in the electric mobility sector, robotics solutions and renewable energy, particularly the wind energy sector.

Phosphate is the feedstock for the emerging dominant battery technology; lithium-ferro-phosphate (LFP). The global LFP battery market is projected to grow from \$10 billion in 2021 to \$50 billion by 2028 as more EVs adopt the safer and longer life technology and grid stabilization batteries expand to balance intermittent renewable generation.

RareX maintains material investments in Kincora Copper (ASX:KCC), Cosmos Exploration (ASX:C1X) and Canada Rare Earth Corporation (LL.V).

For further information on the Company and its projects visit www.rarex.com.au