



Environmental Protection Act 1986

Hon Amber-Jade Sanderson MLA
Minister for Environment; Climate Action

MINISTER'S APPEAL DETERMINATION

APPEALS AGAINST REPORT AND RECOMMENDATIONS EPA REPORT 1712 – KALGOORLIE RARE EARTHS PROCESSING FACILITY

Purpose of this document

This document sets out the Minister's decision on appeals lodged under section 100(1)(d) of the *Environmental Protection Act 1986* in objection to the above proposal. This document is produced by the Office of the Appeals Convenor for the Minister but is not the Appeals Convenor's own report, which can be downloaded from the Appeals Convenor's website at www.appealsconvenor.wa.gov.au.

Appellants:	Mr David Coulston; AidWatch Inc.
Proponent:	Lynas Kalgoorlie Pty Ltd
Proposal description:	The proposal is to construct and operate a facility to produce rare earth carbonate from rare earths concentrate at Lot 500 Great Eastern Highway which is located 7 km from Kalgoorlie. The Rare Earths Processing Facility will process rare earth concentrate from the Mt Weld mine to produce a rare earth carbonate for export
Minister's Decision:	The Minister allowed the appeal in part
Date of Decision:	20 December 2021

REASONS FOR MINISTER'S DECISION

The Minister received two appeals in objection to the report and recommendations of the Environmental Protection Authority (EPA) in respect to the proposal.

Lynas Kalgoorlie Pty Ltd proposes to construct and operate a facility to produce rare earth carbonate from rare earths concentrate at the proposal area at Lot 500 Great Eastern Highway Kalgoorlie, about 7 kilometres from the CBD.

Rare earth carbonate will be transported in closed containers by truck to the port of Fremantle for export to a downstream production facility in Malaysia. The processing facility waste, including iron phosphate that contains low levels of naturally occurring radioactive material (NORM), will be returned to the Mt Weld mine site for disposal.

The concerns raised by the appellants are set out in detail in the Appeals Convenor's report. In summary, appellants expressed concern about the processing and transport of radioactive materials in proximity to residences, and specifically potential impacts to human health and water resources.

Minister's decision

On the basis of the information available, the Minister considered the EPA's report and recommendations were generally appropriate and consistent with the established regulatory framework for the management of low level radiological materials.

The Minister however allowed the appeal to the extent that condition 3 is amended to ensure that the storage of low level radioactive iron phosphate waste at Lot 500 is temporary. Additionally and consistent with the EPA's recommendations on the appeals, the Minister agreed that Schedule 1 should be updated and expanded to provide further advice about aspects of the proposal that the EPA considered would be regulated by other authorities.

The Minister otherwise dismissed the appeals. The full reasons for the Minister's decision are outlined below.

Did the EPA adequately assess impacts from hazardous materials?

Impacts to human health

Appellants submitted that the EPA did not properly consider the health risks to residents and the community of the City of Kalgoorlie Boulder from the radioactive materials and chemicals associated with the proposal. Appellants questioned the adequacy of the EPA's assessment for the storage, transport and disposal of radioactive waste, specifically that the storage of radioactive waste is not specified to be temporary.

The EPA considered the potential impacts to human health from exposure to low level radioactive material from processing and temporary storage of waste at Lot 500. The EPA considered the different routes of exposure including direct radiation, inhalation of radon and thoron, inhalation of radionuclides in airborne dust (including from storage of iron phosphate waste) and stack emissions and exposure during transport.

In Report 1712, the EPA was satisfied that the proponent's Air Quality and Radiation Impact Assessments demonstrated that air quality and radiation impacts from the proposal would be low, noting that both public and occupational doses are well below the respective limits. The Minister was advised that the EPA required peer reviews of both the Air Quality and Radiation Impact Assessments which concluded that these reports were appropriate and provided reliable data on potential radiological impacts from the proposal.

In relation to the transport of low level radioactive material and disposal at the Mt Weld mine, the EPA consulted the Radiological Council which advised that these matters will be managed under the *Radiation Safety (Transport of Radioactive Substances) Regulations*, which requires compliance with the *ARPANSA Code for the Safe Transport of Radioactive Material*. The Radiological Council also confirmed that a Transport Management Plan would be required.

The Minister was advised that the risks of the storage of waste material on Lot 500 would also be subject to other regulatory processes managed by the Department of Water and Environmental Regulation, the Department of Mines, Industry Regulation and Safety, and the Radiological Council all of which were consulted by the EPA during the assessment and confirmed that any risks arising could be managed.

Subject to the Minister's decision below in respect to the storage of wastes and additional recommendations, she accepted the EPA's advice that its assessment considered the potential impacts to human health within the established regulatory framework and accepted its conclusion that the proposal is consistent with its objectives.

Consideration of water resources and extreme weather events

An appellant questioned the adequacy of the assessment in relation to the contamination of surface and groundwater from storage of NORM waste on Lot 500. The appellant also raised concern that the impacts of extreme weather events on the plant and radioactive waste storage areas have not been considered.

In considering the preliminary key environmental factors Inland waters and Terrestrial environmental quality, the EPA considered the site characteristics at Lot 500, noting the absence of significant surface water bodies and creeks and the poor quality and depth to groundwater at the site.

The EPA found, having regard to the proponent's proposed mitigation measures, that impacts to surface water and groundwater are unlikely to be significant and are manageable. The EPA advised that at the conclusion of its assessment that Inland waters and Terrestrial environmental quality were no longer considered key environmental factors.

In relation to extreme weather events, the EPA advised that heavy rainstorms have been considered by the proponent and incorporated into the design of the stormwater infrastructure that may contain contaminated surface water that includes ensuring a large safety capacity and buffer for extreme rainfall events.

The Minister accepted the Appeals Convenor's advice that the EPA's analysis and determination that Inland waters and Terrestrial environmental quality were not key environmental factors for the proposal was appropriate.

Public consultation and consent

Appellants raised concern that public consultation was inadequate, submitting that residents were made aware of the proposed project only recently and that consent is required from affected First Nation communities.

The EPA advised that it considered the process followed during assessment of the proposal provided the public, including residents, with information on the proposal and several opportunities to provide comment. The proponent's documentation provided a summary of community consultation that was undertaken from 2019 onwards.

In relation to impacts to Aboriginal Heritage, the proponent advised that Native Title has been extinguished over the area and that no Registered Aboriginal Sites or Other Aboriginal Sites were recorded on Lot 500 during a survey in 2003.

Are the recommendations appropriate?

Conditions limiting the storage of waste

The EPA included recommendations to limit the volume and footprint for the storage of both iron phosphate waste (up to 132,000 dry tonnes per annum) and gypsum waste (up to 330,000 dry tonnes per annum) at Lot 500.

The EPA advised that it assessed the risks of the storage of waste material at the facility on the basis that it would be temporary and recommended condition 3 (Waste Management) to ensure that storage is temporary.

In response to the appellant concerns, the EPA recommended further changes to condition 3 to minimise the risk to the environment. The Appeals Convenor made additional

recommendations, which the Minister accepted, requiring different conditions in relation to the management of different processing derived wastes.

Specifically, the Minister required that condition 3 be amended as follows:

- adding a requirement that processing waste be stored only in dedicated storage infrastructure for each waste type
- adding a requirement that processing derived iron phosphate waste is removed to the Mt Weld site usually within 12 months or by no later than 2 years of its production (where the product may need to be stored longer than 12 months to ensure it is in an appropriate state and volume for transportation).
- adding a requirement that processing derived gypsum is removed to the Mt Weld site or an alternative waste facility approved by the Department of Mines, Industry Regulation and Safety by the later of 12 months of its production or when the capacity of any dedicated storage infrastructure at the site is being exceeded.

On the basis of the information available, and noting the changes to condition 3 above, the Minister agreed with the Appeals Convenor that the EPA appropriately considered the regulation of potential impacts from the facility within the established regulatory framework in Western Australia. Specifically, the Minister noted the advice from the Appeals Convenor that the identified regulatory agencies have experience in the regulation of similar matters.

The EPA provided notes in Schedule 1 of Report 1712, to provide information to other regulatory authorities. The Minister agreed with the Appeals Convenor and the EPA that the advice notes to other regulatory authorities included in Schedule 1 should be expanded to ensure that proposal and location specific information considered by the EPA as relevant to other decision-makers is made publicly available. In this regard the Minister adopted the recommendations as outlined in the Appeals Convenor's report.

Next steps

The final decision on whether or not the proposal may be implemented, and if so, the conditions to which it may be subject, is a matter for determination under section 45 of the *Environmental Protection Act 1986*.

Finally, should it be agreed that the proposal can be implemented, and noting that waste from this proposal is proposed to be transferred to Mt Weld for disposal, the Minister' view is that there is merit in the EPA inquiring into the conditions of the Mt Weld proposal to ensure they reflect contemporary expectations of waste management practices and consistent with processes administered by the Radiological Council and the Department of Mines, Industry Regulation and Safety.

Given the above, the Minister recommended that the new Minister for Environment consider requesting the EPA to review the Mt Weld implementation conditions (Ministerial Statement 476) in the event the proposal the subject of this appeal is approved. The Minister has also recommended that should a review process be triggered, the EPA should provide an opportunity to direct stakeholders to provide comment during its inquiry.

Note: this decision is published pursuant to the terms of section 110 of the *Environmental Protection Act 1986* and regulation 8 of the *Environmental Protection Regulations 1987*.

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