



Public Health Association
AUSTRALIA

Public Health Association of Australia
*Submission on draft Terms of Reference for
Nolan's Bore Rare Earths Project Environmental
Impact Statement*

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Introduction

The Public Health Association of Australia Incorporated (PHAA) is recognised as the principal non-government organisation for public health in Australia and works to promote the health and well-being of all Australians. The Association seeks better population health outcomes. PHAA has a vision for a healthy region, a healthy nation and healthy people living in a healthy society and a sustaining environment based on prevention, the social determinants of health and equity principles.

Public Health

Public health seeks equitable health for all and goes beyond the treatment of individuals to encompass health promotion, prevention of disease and disability, recovery and rehabilitation, and disability support.

The Public Health Association of Australia

PHAA is a national organisation comprising around 1900 individual members and representing over 40 professional groups concerned with the promotion of health at a population level.

Key roles of the organisation include the development of policy, capacity building and advocacy. Core to our work is an evidence base drawn from a wide range of members working in public health practice, research, administration and related fields who volunteer their time to inform policy, support advocacy and assist in capacity building within the sector. PHAA is an active participant in a range of population health alliances including the *Australian Health Care Reform Alliance*, the *Social Determinants of Health Alliance*, the *National Complex Needs Alliance* and the *National Alliance for Action on Alcohol*.

PHAA has Branches in every State and Territory and a wide range of Special Interest Groups. In addition to these groups the PHAA is responsible for an outstanding peer review journal - the *Australian and New Zealand Journal of Public Health* (ANZJPH).

Advocacy and capacity building

In recent years PHAA has further developed its advocacy role to achieve the best possible health outcomes for the community, both through working with all levels of governments and agencies, and promoting key policies and advocacy goals through the media, public events and by other means.

Comment on draft Terms of Reference

PHAA is a peak non-government organisation with a sustained record of advocacy relating to mining and radioactivity, and their impacts on public and environmental health. PHAA is aware of the proposed Nolan's Bore Rare Earths project and welcomes the opportunity to provide comment on this to help inform the draft Terms of Reference for the Environmental Impact Statement.

PHAA considers the matter of rare earths mines in Australia to be of particular public and environmental health significance given the radioactivity present in the ores and both the short and long term impacts that can ensue. We note that the presence of radioactivity in the Nolan's Bore Rare Earth deposit is sufficient to have triggered a requirement for an Environmental Impact Assessment process under the EPBC Act as a nuclear action.

The Nolan's Bore Rare Earth Project is now proposing to mine a larger area than the original Nolan's Bore Mine proposal was in 2008, and to mine over a longer time period. There will be some significant environmental impacts resulting from this mine. Significant economic investment will be required to bring the mine to production phase.

PHAA recognises that rare earths are being utilized in many ways across numerous industries, some of which have clear environmental and social benefits. We are concerned however about the risks associated with rare earths mining, particularly in relation to the radioactive minerals coexisting with the rare earths in the ore bodies, and consider it important that these risks be minimised where possible.

A key step to risk minimisation is to produce only as much rare earths as is truly required on a global scale. PHAA understands that there has been somewhat of a global oversupply of rare earths in recent years compared to demand and that the Nolan's Bore Mine proposal previously failed to gain commercial funding despite several attempts. We also note that there is considerable room for improvement in the reducing, reusing and recycling of end products containing rare earths. **PHAA recommends that a feasibility study be conducted regarding global rare earths supply and demand before consideration of the Nolan's Bore Rare Earth deposit be further explored.**

It is of concern that the Nolan's Bore Rare Earth Separation Plant is to be subject to a separate approvals process and is excluded from the scope of the amendment to the Mining Management Plan. PHAAs note that at this stage the Separation Plant is assumed to be in the USA Gulf Coast or at other locations with "similar advantages". We note that the Separation Plant for Australia's only currently existing Rare Earths project at Mt Weld in WA is in Malaysia and that this plant has been plagued by claims of substandard practice. There has allegedly been gross environmental contamination and significant public health impacts for local people in the surrounding region of the Separation Plant in Malaysia resulting in large scale community opposition. PHAA suggests that Malaysian Separation Plant does not meet Australian environmental and public health standards and would not be acceptable if operated in Australian territory. **PHAA recommends that the Nolan's Bore Rare Earth project be required to undergo a simultaneous assessment of the extraction process and the Separation Plant and that the former not receive approval until the latter has been shown to meet strict environmental and public health standards such as would be expected in Australia.**

The current proposal for a Rare Earths Intermediate Extraction Plant to be on site at the Nolan's Bore Rare Earth Project is an improvement on the previous plan whereby it was to be transported by road or rail to Whyalla. The resultant rare earths concentrate will be less radioactive than the

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previous ore would have been and therefore will pose less risk in the transportation phase. The concentrate will however retain some radioactivity which could pose significant environmental and public health risks should there be an accident or spill. **PHAA recommends that any transport of the rare earths concentrate be done in fully sealed containers.**

It is noted that the Nolan's Bore Rare Earth project will no longer be drawing water from the Ti Tree Basin. The project will however be using more water than the earlier Nolan's Bore Mine proposal and that this water is a significant amount. This may impact on future availability of groundwater for other purposes. The proposed diversion of two rivers in the project area could potentially have a significant impact on the health of the water catchment. **PHAA recommends that as little water as possible be used in the operation of the Nolan's Bore Rare Earth project. Proposed river diversions should undergo a comprehensive impact assessment. All planned water use for the project should be considered in the broader context of a Territory wide water allocation plan. Extrapolating from previous comments in this submission, PHAA further recommends that there be consideration of downsizing the project according to the real global demand for rare earths.**

The current proposal will result in significant amounts of radioactive ore requiring processing and radioactive waste requiring storage. It is noted that the tailings management at present is not proposed to have dam liners in place and this increases the risk of below surface and groundwater contamination. **PHAA recommends that workers operate according to world's best practice safety standards regarding radiation exposure and that radioactive waste be managed according to world's best practice.**

Given historical problems in obtaining finance and a fluctuating international market for rare earths product the possibility of the Nolan's Bore Rare Earth project stalling prior to its anticipated completion and final rehabilitation needs to be considered. A securely funded mitigation plan needs to be in place in the event of an early closure. **PHAA therefore recommends that the project needs to demonstrate its necessity and long term viability prior to approval being granted. Further, should approval be given then a site rehabilitation fund of sufficient magnitude be required as a condition of approval.**

Conclusion

PHAA appreciates the opportunity to comment on the draft Terms of Reference for this Environmental Impact Statement and looks forward to ongoing involvement with these matters.

Please do not hesitate to contact the PHAA should you require additional information or have any queries in relation to this submission.



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