

**Submission to Senate Standing Committee on Economics - appropriateness and thoroughness of the site selection process for a national radioactive waste management facility at Kimba and Hawker in South Australia**

Dear Committee Secretariat,

I was a member of the Independent Assessment Panel[1] that, through 2015 and into 2016, assisted the Commonwealth Department of Industry with (i) the process of seeking nominations of land for this facility; (ii) establishing assessment criteria for shortlisting; (iii) weighting assessment criteria for shortlisting; and (iv) the process of announcements of listed sites[2].

As stipulated in the remit of the Independent Assessment Panel, we were retained as a source of guidance to the Department with an expectation of serving the process in good faith. Decisions ultimately rested with the Department and the relevant Minister. I was not a co-chair of the Independent Assessment Panel and am not entitled to speak for the panel. Where I make general comment or observation about the work of the panel and the experience, these are my comments and observations. Other members of the panel may offer different views. My overall view is that the current site selection process represents among some of the best practice in the world for such a challenge, and it should be supported and continued.

I am now the executive director of Bright New World, an environmental NGO that seeks greater harmony between human development and the conservation, protection and restoration of our natural world. In relation to Australia's nuclear medical and research sector, Bright New World is strongly supportive of its continued operation and preferably expansion. Nuclear non-proliferation experts have stated[3]

*... nuclear technologies and techniques are **demonstrably valuable for improving human well-being**, especially in fighting disease, helping to grow food, addressing food security and safety, and managing safe water and other natural resources. In health care, nuclear medicine and radiation therapy will continue to be important in providing earlier, more accurate diagnoses and safer, more effective treatments. In food security and safety, nuclear techniques have also contributed significantly in integrating pre- and post-harvest pest-control measures such as food irradiation and area-wide application of the Sterile Insect Technique (SIT) to protect crops and livestock from pests. Techniques for diagnosing trans-boundary animal diseases will be increasingly important for early and rapid detection in both the laboratory and the field. And nuclear techniques have a significant role to play in hydrology, important as the growing scarcity of water resources and the dramatic lack of sustainable access to water and sanitation in developing countries become major impediments to sustainable development, wealth creation and the eradication of poverty.*





[www.brightnewworld.org](http://www.brightnewworld.org)

In this context, Bright New World regards the task of Australia moving towards sustainable, best-practice management of radioactive waste from research and medicine to be a tangible contribution to improving human well-being through beneficial science and technology. I am pleased to offer the committee my perspectives in response to the Terms of Reference.

Ben Heard (Ph.D., MCEM)

Executive Director – Bright New World



**a) the financial compensation offered to applicants for the acquisition of land under the Nominations of Land Guidelines;**

The commonwealth says:

*A property owner whose land becomes the final chosen site for the facility will be paid four times the value of the land[4].*

Speaking as a member of the Independent Assessment Panel and an everyday Australian, the proposed multiple on the land value seems unremarkable. The acquisition would be consequential and beneficial for all Australians, as it will enable Australia to move much closer to international best practice in the management of radioactive wastes from the domestic research and medical sectors.

We must expect compensation at above market value, given that consideration of nuclear-related matters in Australia invariably attracts scrutiny and alarm beyond scientifically robust assessment of hazards. The precaution applied to low and intermediate radioactive wastes is exceptional (not only in Australia) compared to many other waste streams and industrial activity. Relevant examples include our sanguine attitude toward transport, use, and management of wastes from agricultural chemicals[5-7], including ammonium nitrate fertiliser[8] and hydrocarbon fuel[9, 10]. So long as we take an exceptional approach with radioactive waste, there can be no valid criticism of above-market values for land acquisition.

**b) how the need for ‘broad community support’ has played, and will continue to play a part in the process, including:**

- i) the definition of ‘broad community support’, and**
- ii) how ‘broad community support’ has been or will be determined for each process advancement stage;**

The Independent Advisory Panel placed heavy weighting on the criteria of an adequate level of support within a potential host community to progress to detailed assessment. I initially stress *adequate*, rather than *broad*, because (discussed below) determining whether there is a *broad* level of support, from an informed basis, firstly requires information sharing and consultation.

The current site selection process was established on the premise of (i) seeking volunteered sites, from a process open to all Australians, by those with the legal right to offer the site, to be followed by (ii) a process of community consultation and engagement, to provide the necessary information such that community support might be robustly assessed.

The notion of ‘community support’, though, itself raises challenges. Firstly, it is dynamic, changing with time and circumstances. It must therefore be measured across time and circumstances. To be able to measure *change* in sentiment is as important as any ‘snapshot’ measure of sentiment itself.

Secondly, community support is influenced by stakeholders[11], be they representatives of government departments, ANSTO, contracted experts, local government representatives, local



community members, activist organisations, or others. No stakeholder is 'detached'. Every stakeholder (including, now, this Senate Committee) influences community support through their decisions and conduct. Even those seeking, as impartially as possible, to *measure* community support (for example, the Australian Electoral Commission) cannot completely detach from their influence.

Demonstrated behaviours that indicate trustworthiness, transparency, respect, and consideration are more likely to lead conditions where a community can genuinely offer or withhold support. In the event that trust, in particular, is established - support is more likely to be given[12, 13]. These behaviours are often demonstrated in the process of giving and receiving information, facts, and knowledge on specialist subjects. This process of interaction and information sharing is clearly acknowledged in the draft *Code of Disposal for Solid Radioactive Waste* [14]:

*Throughout the site selection process, it is imperative to address the societal dimension of radioactive waste management through effective dialogue with the community with a view to strengthening confidence in the decision-making processes. The safety case will be the main basis on which dialogue with stakeholders will be conducted and on which confidence in the safety of the facility will be developed. Any sustainable process of deliberation and decision-making during site selection will seek to re-connect the issue of waste with a range of social, environmental, health and economic issues, including issues raised by the stakeholders.*

Both identifying adequate support for engagement and then measuring subsequent support is therefore ***an active, interrelated process that requires, and must be permitted, time and resources.*** Events to date attest that the community within the District Council of Kimba has been given, and continues to receive, both time and resources.

Voting managed by the Australian Electoral Commission asked 'Do you support a nomination for a site being **progressed to Phase 2 for further consultation** for a National Radioactive Low/Intermediate Level Waste Management Facility?'[15]. The motion passed with 57.4% majority, from a return of approximately 80% of the votes. This certainly represents an *adequate* level of support for progressing to further consultation.

A third challenge in assessing community support relates to potentially weighting stakeholders within the community boundary. The Independent Assessment Panel considered many criteria in our site assessments, and then weighted criteria to rank those we considered the most important. Similar principles can be relevant in making a finding of 'community support'.

Within the 3,986 km<sup>2</sup> of the District Council of Kimba, the Commonwealth is seeking areas 'likely to exceed 100 ha'[16] (approximately 0.04% of the Council area). Under the existing protocol, all residents of District Council of Kimba have equal representation. During construction and initial loading, the off-site impacts from this facility are likely to be minor and constrained to specific areas close to the site. During operation, the probability of off-site impact from this facility is close to zero[17]. There is no compelling evidence globally that such a facility would have negative reputational or economic impacts to the region (though this concept is much-touted). It is therefore



reasonable to weight the sentiment of stakeholders with either (i) greater proximity to the site itself, or (ii) responsibilities for regional oversight and representation such as:

- The nominating landowner
- The immediate neighbouring landowners
- Stakeholders in the closest settlement to the facility
- Stakeholders in closer proximity to the main transport corridors
- Local government authorities
- Representative economic or industry groups in the local region

If stakeholders of close proximity to the site and those with responsibilities of oversight (i) have been adequately consulted and consider themselves to be well-informed, and (ii) offer either their consent or active support, then the Department might also make a robust case for 'broad community support'. Reducing 'broad community support' to a single number is an oversimplification of a complex process. This should be avoided.

***c) how any need for Indigenous support has played, and will continue to play a part in the process, including how Indigenous support has been or will be determined for each process advancement stage;***

The Department of Industry, Innovation and Science has indicated from the outset that it is seeking broad community support, while asserting no individual or single stakeholder group has power of veto.

In this region, Banggarla people are traditional owners, and National Resources Eyre Peninsula has an established Aboriginal Advisory Committee[18]. These ought provide appropriate points of contact and consultation with those who can speak on behalf of traditional owners.

My expectation is that traditional owners will be contacted in relation to this proposed facility to be offered the opportunity for information sharing, consultation and potentially participation in the development itself. At the absolute minimum, there should be no barrier to identifying a sentiment from the traditional owners in relation to the proposed facility, one way or the other.

Regional Development Australia Whyalla Eyre & Eyre Peninsula states that the Eyre Peninsula region has many unrecorded sites of Aboriginal cultural significance[19]. Cultural heritage survey is essential, and should be undertaken with the direct involvement of the traditional owners. Such an 'independent and comprehensive indigenous heritage survey in collaboration with the traditional owners' is an expectation at Wallerberdina Station (Hawker site)[20]. Sites near Kimba should be taken through the same process.



**d) whether and/or how the Government's 'community benefit program' payments affect broad community and Indigenous community sentiment;**

As in the response to matter (b), all actions from involved stakeholders affect community sentiment. This is normal and unavoidable. The community benefit program fits in this conceptual framework.

As to *how* the benefits program might affect sentiment, I offer three observations of fact:

1. The community benefits program offers *retrospective recognition* for participation in the detailed assessment phase[21]. It is united to any further agreement or consent from the community. This is proven by projects in Hawker/Wallerberdina already approved for funding, and assessment of projects in Kimba. The Independent Advisory Panel offered broad support for this concept (untied recognition for participating communities at early stages).
2. The program is available to Hawker/ Wallerberdina and any community proceeding to the detailed assessment phases. To deny these benefits to the District Council of Kimba would have been (i) discriminatory, and (ii) motivated interference in the agreed process.
3. The opportunity for individuals or groups to apply for project funding under the benefits program is unrelated to perspectives on the National Radioactive Waste Facility itself. Funding assessments are undertaken by local community committees[22].

Delivering the community benefit fund and facilitating prompt assessment and funding of projects is a tangible demonstration of trustworthiness. Trust is essential for building community confidence[11-13]. To the extent that the operation of the Community Benefit Programme might be construed as impacting community sentiment towards the prospect of a facility in a positive way, it should be applauded.

**e) whether wider (Eyre Peninsular or state-wide) community views should be taken into consideration and, if so, how this is occurring or should be occurring;**

The District Council of Kimba is an appropriate definition of community in relation to these site nominations. This determination is part of the responsibility of the Kimba Consultative Committee[22]. For reasons outlined below, this definition must be maintained.

This boundary was important for the initial consideration of community sentiment and was the official boundary for the subsequent vote managed by the Australian Electoral Commission. Altering these boundaries now would damage the integrity of the process. It would make assessment and analysis of community support through changing times and circumstances difficult (see response to matter (b)), rendering any results opaque and uncertain. The process would be subject to greater interference from outside the local community.

Direct consideration of Eyre Peninsula or state-wide community views in this decision is contradictory to the premise on which this process was based from the outset, being (i) freely



volunteered sites from a process open to all Australians, by those with the legal right to offer the site, to be followed by (ii) a process of community consultation and engagement.

The District Council of Kimba has been offered resources including:

- newsletters,
- visits from subject matter experts,
- community delegations to ANSTO,
- a staffed shop-front presence in the township of Kimba,
- a community consultation committee.

This offers the community who will be directly affected the opportunity to make a decision that can be fairly described as *informed*. That level of service cannot be realistically extended to the whole peninsula or the whole state. Nor can we expect citizens in those larger catchments to take an equivalent level of interest in becoming informed. Whole-of-state (or whole-of-nation?) decisions are the job of our elected representatives in parliament. This voluntary, consent-based, local community process was established to move away from that top-down model.

If we value the principle of ‘a supportive community’ then we must be realistic and reasonable in the interpretation of those terms. The District Council of Kimba is a realistic and reasonable interpretation. It is established in the process. It should be retained.

Broadening the definition of ‘local community’ would be a disempowering approach to regional communities from the wider Australian community and one that ignores their capacity to make informed decisions, in their interests, on issues that directly affect them.

***f) any other related matters.***

The Australian community at large benefits from Australia’s nuclear research and medical sectors every day. Our nation-wide preparedness to consume these benefits can be reasonably inferred to represent a broad level of consent, indeed an actual expectation, that the associated waste will be managed according to international best practice. Nearly every Australian household puts a garbage bin at the kerbside once a week, in the expectation of a well-managed service to meet our need. Australia has lagged in providing a comparable level of service for radioactive waste materials.

We cannot reasonably expect every Australian to engage in this siting process to the extent that the Kimba community has done, because the rest of Australia will not be affected in the same way. Our responsibility is to give a quality experience of consultation and information sharing to the local communities. A worthy aspiration is the active support and enthusiasm of a community that will embrace and enhance this project. We cannot achieve these outcomes by stripping local communities of their agency.



1. Australian Government. *National Radioactive Waste Management Facility - Independent Advisory Panel*. [cited 2018 9 March].
2. GHD, *National Radioactive Waste Management Facility Site Selection Framework*. 2015, GHD: Canberra, ACT.
3. Evans, G. and Y. Kawaguchi, *Eliminating Nuclear Threats: A practical agenda for global policymakers*. 2009, Canberra, ACT: International Commission on Nuclear Non-proliferation and Disarmament.
4. Department of Industry Innovation and Science. *Nominating a site*. 2018 [cited 2018 9 March]; Available from: <http://www.radioactivewaste.gov.au/site-selection-process/nominating-site>.
5. Gollnow, B., *Transporting farm chemicals*. 2006, NSW Department of Primary Industries: Gosford, NSW.
6. National Centre for Farmer Health. *Chemicals - safe handling*. 2018 13 February [cited 2018 March 9].
7. Woods, N., *Agricultural chemical user's manual*. 2005, Department of Primary Industries and Fisheries: Brisbane, QLD.
8. ABC News. *Truck hauling fertiliser explodes in outback Queensland, injuring 8*. 2014 7 September [cited 2018 10 March]; Available from: <http://www.abc.net.au/news/2014-09-06/ammonium-nitrate-truck-explodes-in-charleville-queensland-8-hurt/5724512>.
9. ABC News. *Truck driver dies after three-vehicle crash explosion south of Newcastle at Cooranbong*. 2018 15 January [cited 2018 March 10]; Available from: <http://www.abc.net.au/news/2018-01-15/driver-dies-in-fiery-three-truck-crash-on-m1-south-of-newcastle/9330260>.
10. The Guardian. *Victoria fuel tanker collision with car sparks massive explosion*. 2017 23 June [cited 2018 March 10]; Available from: <https://www.theguardian.com/australia-news/2017/jun/23/victoria-fuel-tanker-collision-with-car-sparks-massive-explosion>.
11. Walsh, B., S. van der Plank, and P. Behrens, *The effect of community consultation on perceptions of a proposed mine: A case study from southeast Australia*. *Resources Policy*, 2017. **51**: p. 163-171.
12. Lacey, J., et al., *The art and science of community relations: Procedural fairness at Newmont's Waihi Gold operations, New Zealand*. *Resources Policy*, 2017. **52**: p. 245-254.
13. Moffat, K. and A. Zhang, *The paths to social licence to operate: An integrative model explaining community acceptance of mining*. *Resources Policy*, 2014. **39**: p. 61-70.
14. Commonwealth of Australia as represented by the Australian Radiation Protection and Nuclear Safety Agency, *Code for Disposal of Solid Radioactive Waste*. 2018, Commonwealth of Australia: Yallambie, VIC.



15. Department of Industry Innovation and Science. *Kimba, SA*. 2018 [cited 2018 9 March]; Available from: <http://www.radioactivewaste.gov.au/site-selection-process/assessing-site/kimba-sa>.
16. Department of Industry Innovation and Science, *Radioactive Waste Management - Nomination of Land: Guidelines*. 2016, Australian Government: Canberra, ACT.
17. Department of Industry Innovation and Science. *Community Safety*. 2018 [cited 2018 March 9]; Available from: <http://www.radioactivewaste.gov.au/facility-safety-and-management/community-safety>.
18. Natural Resources Eyre Peninsula. *Aboriginal engagement*. 2018 14 March [cited 2018 19 March]; Available from: <http://www.naturalresources.sa.gov.au/eyrepeninsula/about-us/aboriginal-engagement>.
19. Regional Development Australia Whyalla & Eyre Peninsula. *Our People - Regional Heritage - Aboriginal History*. 2018; Available from: <http://www.rdawep.org.au/our-region/our-people/>.
20. Department of Industry Innovation and Science. *Cultural Heritage*. 2018 [cited 2018 March 19].
21. Department of Industry Innovation and Science. *Community Benefit Programme*. 2018 [cited 2018 March 9]; Available from: <http://www.radioactivewaste.gov.au/jobs-and-business-opportunities/community-support/community-benefit-programme>.
22. Department of Industry Innovation and Science. *Kimba Consultative Committee*. 2018 [cited 2018 March 9]; Available from: <http://www.radioactivewaste.gov.au/community-engagement/get-involved/consultative-committee/kimba-consultative-committee>.

