

ATTACHMENT A

AZARK PROJECT

INTRODUCTION

The Azark Project is developing an underground facility at Leonora in Western Australia for the permanent disposal of nuclear or radioactive waste.

While the Shire of Leonora started the Azark Project and is its main proponent all the administrative and managerial aspects of the Project are undertaken by the company of Azark Project Pty Ltd which was specifically set up for that purpose and is making this submission on behalf of the Project.

In addition the Project participants include Goldfields Carbon Group Pty Ltd as the holder of the pastoral leases comprising the overall Project site

Even though nuclear and radioactive are virtually interchangeable expressions⁽³⁾ for convenience the reference in this submission will only be to nuclear waste.

AZARK SITE

1. The Azark site is regarded as probably the best in the world for the underground nuclear waste disposal facility as it is granite hard rock going to a depth of at least five kms or more which has not moved for over two billion years or had any known seismic activity and is in a remote area.
2. This site is located 16 kms west of the Leonora township and due to its geophysical setting is incapable of supporting any vegetation or animal life.
3. In addition the site has no water table as it is solid rock or any flooding problems as confirmed by historical rainfall records.

4. The site is clear of native title by prior decision and the Aboriginal ancestral holders of the land comprising the site are strongly supportive of and actively involved with the Azark Project.
5. There is the added advantage of the undoubted political stability of Australia by having the facility locally in Leonora.

LEONORA

5. Leonora is an internationally renowned mining centre in the Goldfields region of Western Australia and lies approximately 200 kms north of Kalgoorlie.
6. The Shire of Leonora district hosts a number of significant resources projects including the major mining operations of BHP at Leinster and at Mount Keith and the deep and prolific gold mine at Sons of Gwalia and the rare earths mining operations of Lynas Corporation at Mount Weld.
7. In addition the district has several substantial mineral deposits with Yeelirrie regarded as one of the best and largest undeveloped uranium resources in the world besides other highly potential uranium deposits near Leonora.
8. Being a major mining centre Leonora has all the facilities required for the building and operation of the Azark facility including an experienced workforce and technical knowledge and contracting capacity.
9. Leonora is also a transport hub with road and rail facilities (it being called the country's road train centre) and an airport capable of landing jet planes of up to 300 people carrying capacity.
10. Because of its transport capabilities and its status as a mining centre Leonora has already numerous road trains passing through the town every day carrying explosives, cyanide and fuel as well as rare earth minerals with varying levels of radioactivity while the future development of the Okajee port with a rail link with Leonora is intended for the shipment of the uranium from Yeelirre.

LAND TITLE

11. The land comprising the site is on two separate pastoral stations covered by several pastoral leases and the site boundaries are contained within an exploration licence under the Western Australian mining legislation.

12. This licence has an area of approximately 50 km² but the actual facility will be on a small portion of that area.

13. The exploration licence has given the Azark Project the ability to undertake technical testing and exploratory work on the site which would not otherwise be allowed under a pastoral lease and the title to the land comprising the facility will when completed be either by freehold title or a special grant under state law.

OPERATIONAL PROPOSALS

14. The Azark Project intends to operate the disposal facility as a commercial enterprise by providing final disposal for both low and intermediate level nuclear waste generated in Australia.

15. The federal government already has a substantial quantity of legendary mid-level nuclear waste which could readily be permanently disposed of at the Azark facility.

16. The facility would also cater for future generated waste in Australia and would be capable by size expansion of disposing or at least storing in the most acceptable manner any nuclear waste produced through eventual nuclear power generation in Australia.

17. The internationally prescribed directives and standards by the International Atomic Energy Agency (IAEA) and adopted in Australia by Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) under treaty obligations are that low and intermediate level nuclear waste should be disposed of or at least stored temporarily by underground burial as is intended by the Azark Project.

18. In proposing an aboveground facility for the disposal of low-level waste and temporary storage of intermediate level waste the federal government

is probably failing to adhere to its own international treaty obligations which were reaffirmed several times since their initial adoption by Australia.

COMMUNITY APPROVAL

19. While the Azark site as already stated is not subject to native title it is within the area being the ancestral lands of the Bardu Aboriginal peoples who are very supportive of and actively involved in various capacities with the Azark Project.

20. The site has two overlapping heritage sites which would not be affected in any way by the Project and its operations.

21. In addition the Bardu people want to assist with the Project by undertaking heritage and environmental surveys which can be the basis of the final expert reports and subsequently providing a ranger service to monitor and generally look after the overall area.

22. The general Leonora community is also supportive and in favour of the Azark Project as it is recognised that a large part of the revenues from its operations are intended to pay for many badly needed social and civic amenities including setting up a mobile cardiac clinic to cater for the remote communities in the Goldfields region and establishing the Azark Project facility will be a great boost to the local economy.

FACILITY CONSTRUCTION

23. The construction of the facility for the disposal and storage of nuclear waste would be similar to a normal underground mining operation but the overall cost will be far cheaper as it will not involve any searching for mineral resources.

24. The various engineering aspects of the underground facility construction are being advanced with draft design plans on a decline system and with accompanying costings.

25. The model of the underground facility will consist of declines to access storage levels in a herringbone arrangement for ventilation at

50m and 150m below surface for the various classifications of the waste.

26. The construction of the Azark facility will be undertaken by the [redacted] which is a Western Australian fully comprehensive contractor with major mining and resource contracts and projects throughout the world and is currently undertaking three large mining operations in Leonora including the [redacted] where mining is now down to more than two kilometres vertical underground by declines.

27. The strength of [redacted] is its association with the [redacted]

EXPERT CONSULTANTS

28. The Azark Project has the benefit of internationally regarded consultants and experts for the establishment of its facility including its collaboration with Curtin University which has the world's best mining school at Kalgoorlie

29. The consultants and experts involved with the advancement of the Azark Project include among others Posiva Oy of Finland which is developing the only successful underground nuclear waste disposal facility in the world at Onkalo mentioned by Professor Timmers and other leading international experts in the management and disposal of nuclear waste.

FEDERAL GOVERNMENT

30. Despite the attributes and superiority of the Azark Project the federal government through its Department of Industry Innovation and Science has chosen the locations of Kimba and Hawker in South Australia to develop an above the ground nuclear waste facility designated as the National Radioactive Waste Management Facility which would only provide temporary storage of the intermediate level waste.

31. The selection and acquisition of a site for that facility and its subsequent establishment and operation on the selected site is governed by the *National Radioactive Waste Management Act 2012*.

32. The government has already spent \$41 million over the past four years on the selection of the facility site and intends to spend another \$350 million in building the aboveground facility in South Australia.

33. As against this the Azark Project:

(a) has undertaken all of the work for identifying and assessing its facility site at Leonora at its own cost without any form of government assistance and has achieved far more than the selection process by the Department; and

(b) will be able to construct and commission its underground facility for \$40 million and already has in principle approval for the necessary finance.

34. In May 2017 the Department of Industry Innovation and Science requested and encouraged the Azark Project to nominate its site at Leonora for selection for the national management facility in accordance with the Act and a very full and professionally prepared nomination was lodged with the Department in late July 2017.

35. This was followed by correspondence from the Department requesting additional and rather intricate information to support the nomination but by February 2018 no further word on the nomination was heard by the Azark Project from the Department.

36. It was subsequently discovered that the Department and the responsible minister (Senator the Hon. Matt Canavan) had effectively chosen the three sites at Kimba and Hawker for the national facility and appeared to be relentlessly pursuing their progress despite their disadvantages and the strong community opposition and the substantial and seemingly unwarranted expense.

Substantially fuller and more detailed material is available with regard to any of the foregoing information