

Safety & Security Questions on ANSTO nuclear waste Shipments to a Port in SA: Nuclear Brief (10 Dec 2018) by David Noonan, *Independent Environment Campaigner*

After over 2 ½ years of solely targeting [postcodes in SA](#), the flawed NRWFM site selection process has failed to inform and engage relevant communities on the potential impacts of [nuclear waste storage & transport](#) across key public interest Questions on Safety & Security and Reputational Risks.

The Federal gov. should have to properly engage all relevant stakeholders, to be transparent and to answer a range of key public interest Questions on intended multiple shipments of ANSTO nuclear fuel wastes into SA [through an SA Port](#) and on proposed [indefinite above ground storage](#).

This must cover potential nuclear waste accidents and conceivable terrorist attack risks and impacts.

“In the event of a major nuclear accident, adverse impacts on the tourism, agriculture and property sectors could potentially be profound.”

SA Nuclear Royal Commission: *Tentative Findings, Risks and Challenges, [Impacts on other Sectors](#)* (Feb 2016, p.28)

The SA Nuclear Fuel Cycle Royal Commission (NFCRC) raised and considered potential Nuclear Accidents and Safety & Security issues in the transport of nuclear fuel wastes, with the **Final Report, Appendix L Transport Risk Analysis, Conclusion**, stating:

“...if a cask was lost at sea and was irrecoverable, there is a potential for some members of the public consuming locally sourced seafood to receive a very small dose of radiation”;

Further, the Final Report concluded that terrorist attack scenarios are conceivable during the transport of nuclear fuel wastes. With the potential scenario for rocket attack on the transport of nuclear fuel waste reported as having the greatest potential to cause a release of radiation (see NFCRC Final Report, May 2016, [Appendix L - Transport risk analysis](#) Conclusion, p.312).

A further Jacobs MCM desk top Report ("[Safety and risks in the transportation of radioactive material to and from Australia](#)" 15 April 2016) to the NFCRC assessed Safety and Risks and **Concluded** (p.50) that radioactivity that escapes from an unrecovered and degrading nuclear fuel waste cask is expected:

“to be diluted in thousands of cubic kilometres of seawater”

Seven key Safety & Security Q's were [submitted](#) to Minister Canavan in Nov 2018 (see p.11-12):

Q 1: What are the comparable marine contamination risks in this case of a co-located nuclear fuel waste Store in SA with intended required requisition of a Port in SA for multiple shipments of ANSTO nuclear fuel wastes, from circa 2020-21 over decades through to the 2060's, which correspond to reported **marine contamination risks** cited in:

- Conclusions of the SA NFC Royal Commission Final Report [Appendix L - Transport risk analysis](#) Conclusion (May 2016, p.312)?
- AND cited in Conclusions of the Jacobs MCM Report to the NFCRC "[Safety and risks in the transportation of radioactive material to and from Australia](#)" (15 April 2016, p.50)?

Q 2: What are the wider implications for the Eyre Peninsula - including on the reputation of agricultural export industries, in the Federal gov plan to requisition a Port on Eyre Peninsula for multiple shipments of ANSTO nuclear fuel wastes from circa 2020-21 over decades through to the 2060's AND in proposed *indefinite* above ground Storage of nuclear fuel wastes at Kimba?

Q 3: In the event of a major nuclear waste accident during the period & stages of proposed NRWMF Store operations in SA what are the scale and type of potential adverse impacts on SA and on sectors in SA, which correspond to the reported potentially "*profound*" adverse impacts cited in:

- Findings of the SA Nuclear Royal Commission: ***Tentative Findings, Risks and Challenges, Impacts on other Sectors*** (Feb 2016, p.28)?

Q 4: What are the conceivable terrorist attack scenarios in this case of a co-located nuclear fuel waste Store at a NRWMF site in SA, and associated intended required requisition of use of a Port in SA & consequent nuclear waste transport onto a NRWMF site in regional SA, which correspond to reported conceivable terrorist attack scenarios cited in:

- Conclusions of the SA NFC Royal Commission Final Report [Appendix L - Transport risk analysis](#) Conclusion (May 2016, p.312)?

Q 5: What the potential impacts on SA of the occurrence of conceivable terrorist attack scenarios in the period & stages of proposed NRWMF Store operations in SA, including in:

- Shipping of ANSTO nuclear waste off SA waters & through SA waters including the Gulf;
- Intended decades of nuclear waste Port operations in SA, with Port Pirie, Whyalla and Port Lincoln named as potentially required ports in Federal gov. reports in July 2018;
- Transport of ANSTO nuclear waste by road or rail from a requisitioned SA Port to a irradiated / reprocessed nuclear fuel waste Store in regional SA;
- And in intended *indefinite* above ground storage of ANSTO irradiated / reprocessed nuclear fuel wastes at either Kimba or Hawker?

Q 6: What type and scale and coverage of nuclear accident & terrorist attack scenario Insurance (if any) does the Federal government intend to provide to cover South Australia and to cover third parties for potential impacts & losses, in and associated with:

- Intended multiple shipments of irradiated / reprocessed nuclear fuel wastes into an SA Port;
- Transport of nuclear waste by road or rail from an SA Port onto a nuclear fuel waste Store in regional SA at either Kimba or Hawker;
- Intended *indefinite* above ground nuclear fuel waste storage operations at a NRWMF Store?

Q 7: What type and scale and coverage of nuclear accident & terrorist attack scenario Insurance (if any) did the Federal government provide for:

- The July 2018 shipment of ANSTO nuclear fuel waste out of Port Kembla in NSW to France;
- The Dec 2015 shipment of French reprocessed nuclear fuel waste to and through Port Kembla and on to the ANSTO facility at Lucas Heights?

Further info at: <https://nuclear.foe.org.au/noonan/> & <https://nuclear.foe.org.au/waste>