27 /9/2018

Please accept this correspondence as an objection to Eraring Power Station - Ash Dam Expansion MOD 1.

Firstly I object to the proposal on the fact that there has been very little community consultation. Having been a previous member of the Eraring Community Forum & having spent considerable time & effort forwarding a lengthy objection circa 2007. I find it appalling that I only learnt of this propsal by chance in recent days. Upon trying to learn more about the proposal I note it fails to even have a completed application form which contains the most basic yet important details - eg Date duly made nor a Modification Number

Request to modify a major project



Date duly made://	Modification No.	***************************************
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I object to lack of information & clarity over the most basic elements of providing public information for scrutiny. There is confusion whether the project is proposing to drill below the current ash dam; which I have understood to have been a wetlands once adjoining Lake Macquarie. With what below? A water table or old mine workings? In recent years Centennial Coal has also proposed to extend their mine workings under the ash dam.

I object on the grounds that the Eraring Power Station ash dam or otherwise labelled 'Coal Combustion Product Placement' expansion will create, *inter alia*, an intolerable danger to:

- The health and safety of residents, visitors and future generations- Particularly Families & Children attending nearby Myuna Bay Sport & Recreation Camp facility eg Children attending Canteens Camp Quality.
- Marine & Aquatic Flora & Fauna including impacting 'improved seagrass meadows' possibly created as a side effect of the alteration to the natural marine ecology through Power station operations emmitting various chemicals & minerals otherwise absent. Along with increasing temperature and turbidity adding to favourable growth. These seagrass meadows are favoured & consumed by species afforded high legal protection. Threatened & Endangered Marine Turtles, are subject to numerous international and migratory species obligations and memorandums, including BONN & CITES I believe any further modification of the existing proposal should trigger referral for assessment under the EPBC Act to the Federal Government. These rare cold blooded reptiles are knowingly drawn to the hot water outlet canal where there is heated marine waters in adjacent Myuna Bay. Already discharged & escaped coal fly ash has accumulated over decades. Possibly encouraging growth of these meadows however the risks regarding uptake of harmful toxins to these & other species I do not believe has been adequately assessed; if at all acknowledged.

- Our local environment and wider adjoining ecological environments with the tidal flows to and from Lake Macquarie including many precious fish stocks & seafood. Both larger species and down to small shellfish, many of these are consumed by humans & other species including our resident & migratory avian species. This also includes Threatened & Endangered species - eg documented Endangered Osprey.
- The Fly Ash Dams structural integrity is also questioned. World wide it is sadly becoming more common to find these dams breaking, releasing and destroying towns and waterways. Given the size and modifications made to date from an original power station proposal, it is time that these modifications and expansion cease. The site was never envisaged to be this massive on the near shores of one of the countries biggest Salt Water inland waterways. It was originally used as an ash dump for the smaller now decommissioned Wangi Wangi Power Station & in excess of 50 years on it certainly has long exceeded its use by date. This heightened risk must seriously be independently assessed with more transparency & with more rigorous scientific research. With the Public given ample opportunity to understand & respond over health & safety environmental concerns, not to just come across the proposal by chance.
- Whilst we may be called 'Lake Macquarie' we are in fact a Lagoon. A particular and important estuary with intertidal values important for sustainability. Over 50 years I have witnessed impacts & changes to a once rich marine ecology; which held, and still holds, much significance & cultural value to Awabakal people. Also to many generations of Europeans since. Sadly to have to now see a site once brimming with a range of shellfish in a state of near denuded original biodiversity is a failure on the industry and regulators part. Myuna Bay now has more dead & empty periwinkles and small shellfish than alive.
- Seahorses are now almost impossible to locate albeit one seen struggling in foam and litter clearly from the power station outlet (including copious amounts of contractor earplugs & even a Eraring Energy job tag), indicating a attitude not in keeping with community & environmental standards - When reported to authorities the response was 'a tool box talk' to contractors. Hardly punishment for potential harm to precious ecology & species.
- The leaching and leaking of ash and slurry into our environment must cease. I have no confidence that the modifications proposed will address this serious environmental issue.
- Eraring Ash Dam has had an inability to contain its fly ash for decades now. Hot
 westerly winds would see this dust blown across Myuna Bay over residents' houses
 and no doubt further afield to local schools and sporting areas.

- Personally I have witnessed occassions where large machinery would operate during these hot westerly winds with little if any regard for minimising the escape of ultra fine & fine particulates. Surely this is not rocket science for staff to avoid stirring it up and if there was to be unavoidable activity surely wetting down roads & the site would be a reasonable expectation.
- However, despite past assurances, I saw what I can only describe as failures & disregard for others. These are known hazards to our health and conduct like this indicate an air of irresponsibility and contempt towards the wider community and the environment.
- The Eraring Power Station ash dam poses an unacceptable hazard to the health and safety of the residents and environment of Lake Macquarie and increasing the volume of coal ash stored indefinitely on the shores of Australia's largest saltwater coastal lake is irresponsible.
- The proposal now claims to extend the operational life of the ash dam to approximately 2024. No mention is made in the EIS of what is proposed for the ash generated after this time.
- Previous submissions have suggested that Fly Ash be returned to the voids in the Valley away from waterways to the disused mines. Why is this not the priority?
- The Eraring Power Station has also failed to meet its obligations to reuse coal ash with a target of 80%. Only 37% of the ash generated is currently reused. Obviously the station made claims previously it could not fulfill. This is a substantial failure to deliver on undertakings. How is this in anyway acceptable? How can we have confidence in what we are told?
- The proposal basically if approved would allow the unlimited & continued dumping of heavy metal laden coal ash leachate into Lake Macquarie from its cooling water outflow and through listed coastal wetlands of Whitehead Lagoon to the west of the ash dam all ultimately into Lake Macquarie.
- These wetlands aditionally are used by the Sport & Recreation camp including for Water Ski jump training & championships. Surely allowing boats to stir up heavily laden sludge in this wetland is not condusive to containment in any form. Nor is it in the interest of maintaining the health of species that feed here be they aquatic marine avian, reptilian or human.

With these real & potential impacts and obvious onset of global warming, the increased erratic weather events serve to increase the likelihood of extreme downpours washing & causing more excessive stored coal ash into Lake Macquarie, we can no longer accept this practice.

The Precautionary Principle must be followed.

It is totally irresponsible that we allow this to continue to occur with such harmful short & long term impacts.

This includes altering and degrading resilience & diversity of our interdependent fauna and flora species. The Black Swan & Pelican (on our Lake Macquarie emblem) along with other smaller wader bird species some being Threatened & Endangered migratory Waders, all feed in this adajcent Myuna bay and nearby Whiteheads Lagoon.

The hot water outlet encourages species not normally present due to the 'burley' type material that exits the outlet. The potential for negative impact on the breeding & ability to produce offspring is real. Selenium uptake for eg increases as it moves up the foodchain. For egg laying animals this can result in brittle egg shells, shattering opportunities for successful chics.

Such further degradation of the environment of Lake Macquarie and beyond coupled with the direct and indirect cumulative health effects on our families and future generations will no longer be tolerated.

Asbestos was once considered safe as was Plasminco (Sulphide Corporation lead smelter) at the Northern end of the lake. Do not leave another legacy for future generations to try to repair.

The science is in. We can not continue to prop up nor continually 'modify' an industry that was told of the need to address these problems decades ago. With so many obvious hazards to our own wellbeing and that of our other species the failure to sensibly provide solutions addressing protection to our immediate & wider environment both on land & water is unacceptable.

I genuinely believe it would be a breach of your duty of care to approve this proposal in its current form. Particularly with such limited community knowledge & input & definitely in its current poor standard.