# INQUIRY INTO COSTS FOR REMEDIATION OF SITES CONTAINING COAL ASH REPOSITORIES

Organisation:

Keep Lake Macquarie Clean

6 October 2020

Date Received:



# Supplementary submission to Legislative Council Public Works Committee Inquiry into Ash Dam Remediation Costs 6<sup>th</sup> October 2020

#### **Initial Comments**

KLMC is a group of concerned professional people living in Wangi, a peninsular located about 4km east of the Eraring Ash Dam. Our group possesses varied professional skills, ranging from journalism through to technical and environmental professions.

We are aware of previous submissions made by Paul Winn from Hunter Community Environment Centre (HCEC) and Gary Blaschke from the Coal Ash Community Alliance and generally support their comments and conclusions.

We seek the committee's indulgence to make a supplementary submission to our original submission.

## Terms of Reference 1(d) "adequacy and effectiveness of the current regulatory regime for ensuring best practice remediation of coal ash repositories"

### 1. Leachate

Similar to HCEC's submission, we believe the current licence requirements in relation to monitoring of leachate are inadequate. It appears that there is no published attempt to analyse the monitoring data either in relation to trends over time, spatial movement of contaminants in ground- or surface water, or impact of those contaminants on the lake environment. A comprehensive groundwater study by independent consultants should be implemented to determine the origin and extent of leachate entering the lake.

#### 2. Surface Water

 Surface water monitoring results are also inadequate. Publicly available data does not provide any results of water quality discharging over the dam weir during rainfall events.

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 The EIA hydrological investigation in 2007 found that "only a very low rainfall (86mm/day) is needed over one day to raise the ash dam water level to RL125.5 (where discharge to Crooked Ck is initiated)..." This rainfall intensity is equivalent to about a 1 in 1 year rainfall event.

This means that up until 2007, overflows of unknown quantities of contaminants have been deposited in Lake Macquarie every year since its original construction.

#### 3. Ambient Water Quality in Lake

No comprehensive monitoring of the lake is available. Some reports have been prepared but they do not in themselves or together paint a picture of heavy metal pollution.

### 4. Licence Requirements

We believe the inadequate monitoring, and penalties for breaches, having failed to keep pace with community expectations and now being so low that they provide no incentive for the operators to comply fully with licence conditions, is evidence the EPA has been "captured" by the industry.

#### Terms of reference 1(e)

## "mitigation of actual or perceived conflict of interest arising from the state having ongoing liability for remediation costs the quantum of which will be impacted by government policy and regulatory action."

- 5. There is a clear conflict of interest with the government being both the "regulator" and the previous owner responsible for heavy metal pollution prior to the sale of both Power Stations. The lack of comprehensive environmental monitoring over time makes it difficult to assess this division of responsibilities. This clearly suits a State that does not wish attention to be drawn to the extent of contamination and thus the extent of remediation that may be required. An independent study of core samples of sediment in the southern part of the lake would provide a picture of heavy metal deposition over time.
- 6. In relation to ash reuse, we generally support Gary Blaschke's submission regarding the unacceptable extent of ash reuse and make the point that while ever ash exists, contamination will continue.

## Terms of reference 1(f)

## "risks and liabilities associated with inadequate remediation including community and environmental health impacts"

- There have been two recently publicized breaches of the licence relating to pollutants blowing into the air from the existing Eraring power station ash dam and Vales Point stacks
- 8. Other than promising to reuse 80% of the ash, the Environmental Assessment dated August 2018 did not address adequately the remediation of the ash dam nor did it address adequately the long term effects of the ash dam emplacement on the environment or health of communities.
- 9. There is an obvious need to remediate the ash dams once power stations cease to operate. However, we are concerned that while a simple "cap and cover" may address the issues of air pollution, it will not prevent the cumulative effects of leachate continuing to enter the lake over an extended period of time.
- 10. A study of the health effects of Power Stations in 2018 found that Eraring and Vales Point make the largest contribution to the health burden from power generation, since prevailing weather patterns are most likely to carry pollutants from these sources into the Sydney basin where the largest population resides. Based on the current expected closure date of the NSW power stations, it is estimated that 3,429 additional deaths will occur in NSW between the present day and the closure of the last station. (*The health burden of fine particle pollution from electricity generation in NSW. Dr Ben Ewald B.Med, PhD, November 2018*).
- 11. A study of seafood was undertaken by the EPA in 2018 which found unacceptable levels of selenium in fish and cadmium in crabs, resulting in recommendations to reduce the consumption of crabs. This report, inexplicably, was not released to the public and was only released in response to a freedom of information request by the Hunter Community Environment Centre.

## Conclusion

- 1. We believe there are gaping holes in the data available that create uncertainties in environmental risks and costs of remediation. These costs cannot be determined with any accuracy without the full knowledge of:
  - a. Exactly what needs to be remediated;
  - b. The extent of that remediation; and
  - c. How that remediation will be undertaken safely and in an environmentally appropriate manner.
- 2. The citizens of Lake Macquarie are not receiving meaningful reports on water and air quality. Regular testing and other investigations should be carried out by independent and impartial organisations, and results should be promulgated in language that everyone can comprehend with regular; clear and comprehensive

communications.

- 3. We have no confidence that the EPA is in control of the industry and is not focused on meaningful environmental outcomes and protection of community health. Adequate control of the industry should be implemented by enforcing licence conditions and increasing licence penalties.
- 4. And finally, some of you on this committee who live in other parts of NSW may not appreciate just how much we as citizens of Lake Macquarie love our Lake. It's as close to our hearts as Sydney Harbour is to the people of Sydney. It is the very essence of our community.

We ask you to appreciate this and trust your findings will show that appreciation in a way that best preserves the health of the lake and the health of those of us who live around it.

Bruce Macfarlane

David Tait

On behalf of Keep Lake Macquarie Clean

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