Submission No 67

INQUIRY INTO COSTS FOR REMEDIATION OF SITES CONTAINING COAL ASH REPOSITORIES

Name: Name suppressed

Date Received: 16 February 2020

16th February 2020

Dear Sir/Madam,

RE: Inquiry into the Costs for remediation of sites containing coal ash repositories

As a resident of the city of Lake Macquarie and a parent, I am extremely concerned about the effects of the coal ash dams and the aging coal- powered fire stations at Vales Point and Eraring. It has come to my attention that the facilities at these mentioned locations are not operating within the confines of the current legislation and have been given exemption from these laws. Due to this fact I recommend all operations at these facilities cease until either the out-dated coal-power facilities are replaced by renewable energy power stations or at the bare minimum updated at the expense of the private owner, not the government.

According to research, unlined coal-ash dams leak, posing unacceptably high ecological risks (Lemly et al. 2012) and contaminate the surrounding environment and ground water (Harkness et al. 2016). The Lake Macquarie region is well known for its beautiful lake, water activities and fishing. Given the evidence of contamination and ecological trauma, the right thing to do is to prevent further damage being done to not only our community members (Grasby et at. 2011) but also the wildlife and ecologies that call the area home as well.

Considering the bio-accumulation of the heavy metals being leached out these dams (Bryan 1992, Delta Electricity 2018, ELCOM 1975), many native bird and fish species are unable to reproduce and maintain ecosystem numbers (Garrett 1984, FA 2010). This could have devastating impacts on the surrounding regions' economy and tourism sectors. It also means that consumption of Mud crab and Blue swimmer crab from Lake Macquarie could result in over-exposure of cadmium and over-exposure of selenium in children if they consume Fin-fish. These over-exposures can lead to a multitude of health problems which will also put extra pressure on the local economy and health systems. Using the coal-ash for something practical rather than letting it sift into the environment seems the intelligent thing to do .

Further recommendations for these sites includes:

The NSW EPA amend the Eraring (EPL 1429) and Vales Point (EPL 761) Environmental Protection Laws so that the maximum concentrations limits for water discharge adhere to the ANZECC (2000) guidelines.

The NSW government commits to decontaminating the Vales point and Eraring power station sites.

The NSW government ensures there are adequate funds set aside to decontaminate the sites affected comprehensively so that Lake Macquarie's coal ash sites may be returned to wetlands habitat.

The NSW government carries out feasibility studies into the environmentally responsible re-use of coal ash and uses these studies to use the coal ash in an environmentally responsible manner.

The EPA revoke the Coal Ash Exemption 2014 and ensure NSW power station operators obtain a 'Waste storage - hazardous, restricted solid, liquid, waste licence for ash dams and a 'Hazardous waste recovery licence for its beneficial reuse.

To reduce the amount of coal ash dumped in ash dams in NSW and encourage its safe reuse, the NSW Government list coal ash as an assessable pollutant in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009, and the EPA impose a load-based licence fee of at least $20 a tonne on all coal ash disposed of in ash dams, landfills, and mine voids; and review load-based license calculations and amend them to reflect the pollutants discharged and additional water pollutants including arsenic, cadmium, chromium, copper, lead, and zinc be added to Water Pollutants in Schedule 1 of the Protection on of the Environment Operations (General) Regulation 2009 under the heading "generation of electrical power from coal".

The NSW Government launch an investigation into possible safe commercial uses of coal ash and look to incentivise new on-site industries around safe coal ash reuse as a means of ridding the heavy metal burden of coal ash landfills, rehabilitating coal ash dams and providing affected workers with alternative employment when the State's coal-fired power stations are decommissioned.

Yours sincerely,

References:

Bryan, G. W., & Langston, W. J., 1992. Bioavailability, accumulation and effects of heavy metals in sediments with special reference to United Kingdom estuaries: a review. Environmental pollution, 76(2), 89-131.

Delta Electricity, 2018. Environmental Licences and Monitoring http://www.de.com.au/environment/environmental-licences-and-monitoring

ELCOM - Electricity Commission of NSW, 1975. Eraring Power Station EIS.

Food Authority 2010. Inorganic arsenic in seaweed and certain fish, October 2010,NSW/FA/CP043/1102, NSW Food Authority. http://www.foodauthority.nsw.gov.au/_Documents/scienceandtechnical/inorganic_arsenic_seaweed_seafood.pdf

Garrett GP, Inman CR, 1984. Selenium-induced changes in fish populations in a heated reservoir. Proc Annu Conf Southeast Assoc Fish Wildl A 38:291–301

Grasby SE, Sanei H & Beauchamp B, 2011. Catastrophic dispersion of coal fly ash into oceans during the latest Permian extinction. Nature Geosci. 4, 104–107. https://www.researchgate.net/profile/Benoit_Beauchamp/publication/49120396_Catastrophic_dispersion_of_coal_fly_ash_into_oceans_during_the_latest_Permian_extinction/links/02e7e51ed96afae308000000/Catastrophicdispersion-of-coal-fly-ash-into-oceans-during-the-latest-Permian-extinction.pdf

Harkness JS, Sulkin B, & Vengosh A. 2016. Evidence for Coal Ash Ponds Leaking in the Southeastern United States. Environmental Science & Technology 50 (12), 6583-6592 DOI: 10.1021/acs.est.6b01727

Lemly AD, Skorupa JP. 2012. Wildlife and the Coal Waste Policy debate: Proposed rules for coal waste disposal ignore lessons from 45 years of wildlife poisoning. Environ Sci Technol 46: 8595 – 8600.