

**Submission
No 38**

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

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Date Received: 14 February 2020

Submission to the NSW Legislative Council 14 Feb 2020.

Remediation of Coal Ash Repositories NSW.

Introduction

My name is Ron McLaren and I have worked for 40 years in the fly ash industry. My main role has been to utilize fly ash and hence illuminate the need for it to be deposited on site in ash dams. (see attached Experience in the fly ash industry)

The main utilization of fly ash has been into the cement and concrete industry. Fly ash is a valuable component in concrete increasing its durability and other plastic and hardened state properties. The inclusion of fly ash also allows a reduction in the amount of cement used. Mining to feed cement plants with limestone is frequently carried out in sensitive environmental regions. More importantly the manufacture of cement has significant CO₂ emissions as CO₂ is driven off in the conversion of limestone to cement clinker.

Years 1980-1998

I managed the company Flyash Australia (FAA) with plants to collect, process and market fly ash from Eraring, Mt Piper and Bayswater power stations. FAA was a joint venture owned by Boral and Rocla.

To allow the technical benefits of fly ash to be highlighted I was instrumental in forming the Ash Development Association of Australia (ADAA). Major research programs were conducted at the CSIRO to provide information to specifiers on the benefits of fly ash concrete.

During this period the utilization of fly ash increased markedly. Geographic markets for NSW fly ash were established in Victoria, Queensland and Tasmania. New uses of fly ash were found in road making, mine backfill, agriculture, geo polymer concrete etc. A proposal to build at Eraring a fly ash lightweight aggregate plant of 500000 tpa reached the feasibility stage but did not proceed with the NSW Government restructuring the power industry for its eventual privatisation. If the proposal had reached fruition very little of Eraring fly ash would have directed to the ash repositories.

Years 1998-present

While still manager of FAA in 1998 Rocla sold its shareholding in FAA to Cement Australia (CA). CA is a joint venture between two giants in the world construction industry, La farge-Holcim of Switzerland and Heidelberg Cement of Germany. The companies are cement makers and have little interest in promoting fly ash and in fact they limit its use as they make more returns selling cement than fly ash. Sales to other states have stopped and there is little research for new uses or other promotions. In 1999 I left FAA as my plans to further increase the use of fly ash was no longer welcomed by the new management

Origin Energy at Eraring have made some efforts to increase utilization with a facility to load trucks with unprocessed fly ash. However, without active marketing there are few sales.

They have also allowed a small operator to process and market to the concrete industry. The power station plant allows collected fly ash to be split into two streams fine and coarse. FAA has exclusive rights to the fine stream suitable for concrete with the other operator left with coarse material needing significant processing.

Future

Attached spread sheet (Estimate of tonnes of fly ash produced and tonnes utilized) is my estimate for Australia. The NSW figures show over 3 million tonnes per year being directed to disposal. Assume stations will operate at similar levels for the next 10 years or 30 million tonnes to repositories. Maybe some slow down after 10 years but still significant volumes.

I urge the NSW Government to act on this situation and reduce the need for ash repositories, avoid waste, reduce land and water contamination and reduce CO2 emissions.

Ron McLaren

Attachments

Experience in fly Ash Industry

Estimate of tonnes of fly ash produced and tonnes utilized

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