Inquiry into costs for remediation of sites containing coal ash repositories



The NSW Government welcomes the Public Works Committee's inquiry into Costs for remediation of sites containing coal ash repositories. This whole-of-government response reflects the extensive work already being undertaken across numerous NSW Government agencies to ensure that the management of coal ash repositories is transparent and effective in mitigating the risk of environmental harm.

## **Recommendation 1**

That the NSW Environment Protection Authority and Dams Safety NSW establish a Memorandum of Understanding by 30 June 2021 in relation to the management and remediation of coal ash dams.

#### **Government Response: Supported**

The NSW Environment Protection Authority and Dams Safety NSW have established a Memorandum of Understanding.

## **Recommendation 2**

That the NSW Environment Protection Authority establish air and groundwater monitoring sites surrounding all power stations and coal ash dams, and that current, real time and historical data of these and other existing monitoring sites be published on the Authority's website by 1 July 2022.

## Government Response: Supported

The NSW Environment Protection Authority is committed to implementing improvements to environment protection licence reporting requirements to improve transparency in this area.

The NSW Environment Protection Authority is reviewing water data from power stations to inform a reset of licence requirements and currently makes available real time air data through the NSW Department of Planning, Industry and Environment Air Quality Monitoring Program which includes monitoring sites for the lower Hunter and Central Coast regions. A new monitoring site at Morisset on the Central Coast was commissioned in 2020.

## **Recommendation 3**

That the NSW Environment Protection Authority conduct and publish a study of surface and groundwater around all coal fired power stations and associated coal ash dams, and their potential impacts on the surrounding environment, by the end of 2022.

## **Government Response: Supported**

The NSW Environment Protection Authority commits to understanding the impacts of coal ash on the environment through its research agenda. The NSW Environment Protection Authority will undertake this study in a staged manner in parallel with the review and reset of licence requirements described in Recommendation 2. The updated licences are intended to provide ongoing monitoring and assessment after the NSW Environment Protection Authority work is complete.

## **Recommendation 4**

That the NSW Environment Protection Authority publish, in real time, breaches of environment protection legislation.

## **Government Response: Supported**

Clear and transparent communication is critical to ensuring the community is informed about breaches of environment protection legislation and how the NSW Environment Protection Authority regulates coal ash dams. Details of notices, orders, prosecutions, mandatory audits, pollution studies and pollution reduction programs that have been issued in response to breaches of environmental legislation are already available on the public register. However, the NSW Environment Protection Authority is committed to continuous improvement in how it communicates with the public and will undertake to publish, in real time, breaches of environment protection legislation.

## **Recommendation 5**

That Dams Safety NSW publish on its website in a timely manner, where practicable, all ash dam assessments and responses undertaken by Dams Safety NSW or submitted to it by power station operators from time to time.

## Government Response: Supported

All owners of declared dams, including coal ash dams, will be required to submit their first annual dams safety standards compliance reports in March 2022 and make them publicly available. Dams Safety NSW will also publish on its website penalty notices and prosecutions resulting from regulatory non-compliance.

## **Recommendation 6**

That NSW Health immediately undertake an epidemiological assessment of the health of residents near coal ash dams to establish the health impacts of coal ash and publish by 31 December 2022.

## **Government Response: Noted**

NSW Health is committed to understanding the impacts of coal ash on the health of communities. An epidemiological assessment of the health of residents near coal ash dams will not establish whether observed health outcomes are attributable to chemicals in coal ash. However, following consultation with the Coal Ash Community Alliance and allied organisations, NSW Health will propose alternative study types which are better able to address the community's health concerns. Exposure assessment or health risk assessment studies would provide greater benefit compared to an epidemiological study.

## **Recommendation 7**

That the NSW Environment Protection Authority commission a comprehensive and independent assessment of the environmental impacts of coal ash dams to provide a better understanding of the issues and to inform best-practice remediation.

## **Government Response: Supported**

The study of surface and groundwater as outlined in response to Recommendation 3 will provide the NSW Environment Protection Authority the basis for further work to identify the impacts of coal ash dams compared to other sources of the same pollutants at power stations.

The NSW Environment Protection Authority will utilise the results of work under Recommendation 3 and timing of power station shutdown to inform next steps.

## **Recommendation 8**

That the Department of Planning, Industry and Environment establish a coal ash reuse taskforce comprising state government agencies, unions, industry stakeholders and community groups to lead development of a strategy to achieve at least 80 percent reuse of coal ash produced in New South Wales, and report by 2022.

## **Government Response: Noted**

The Waste and Sustainable Materials Strategy 2041 outlines the NSW Government's commitment to support the development of sustainable markets for recycled products, such as plastics, coal ash, glass and rubber. This commitment includes a requirement for NSW Government agencies to procure recycled content on an 'if not, why not' basis, funding to assist the transition and support for the market to respond to the increased demand for recycled material.

The NSW Government will work closely with procurers and suppliers to drive a smooth implementation of the new procurement policy.

## **Recommendation 9**

That the newly established coal ash reuse taskforce inquire into and review regulations affecting coal ash reuse, including:

- » the stability and regulation of ash dams
- » waste standards to ensure that coal ash is not contaminated with other waste, and
- » land remediation, including the state and effectiveness of current capping, the current and future risk of leakage of contamination into the surrounding environment, and impacts of vegetation cover (including any contaminated vegetation, release of contaminants into the air via transpiration and cracking of capping materials) to ensure the safe and beneficial reuse of coal ash while promoting strong environmental and public health standards.

## **Government Response: Supported in principle**

Existing regulatory mechanisms including licence reviews, pollution reduction programs and licence conditions have been and will continue to be used to drive improved performance where it is appropriate, achievable and feasible.

These existing regulatory controls combined with commitments in the Waste and Sustainable Materials Strategy 2041 provide a comprehensive way forward to ensure robust regulation and encourage innovation.

## **Recommendation 10**

That Transport for NSW review its procurement practices to, where feasible, mandate the use of recycled coal ash in government-funded transport infrastructure projects.

## **Government Response: Supported in principle**

Transport for NSW already uses large quantities of fly ash in government-funded transport infrastructure projects and has also used bottom ash when suitable.

Transport for NSW is committed to reviewing procurement practices including considering greater use of recycled coal ash products in specific projects where feasible; however, mandating the use of recycled coal ash in some cases is not feasible. A combined fly ash and bottom ash product would be limited in its application and may need to be encapsulated. The feasibility of using recycled coal ash will consider environmental, safety, technical and project costs.

## **Recommendation 11**

That Infrastructure NSW review its procurement practices to, where feasible, mandate the use of recycled coal ash in government-funded infrastructure projects.

## **Government Response: Noted**

Infrastructure NSW does not have a role in determining specifications for materials or building methods for infrastructure delivered by other agencies.

## **Recommendation 12**

That Transport for NSW review the construction standards for roads, with a view to ensuring that local government trials the use of coal ash in its road construction.

## Government Response: Supported

Transport for NSW will review road construction standards including fly ash and bottom ash requirements which can be adopted by local government.

Transport for NSW already allows suitable fly ash and bottom ash (the components of coal ash) in appropriate road construction standards which local government can adopt. Transport for NSW proposes to assess fly ash acceptance criteria as part of future developmental research. Depending on the outcomes of the research, road construction standards will be amended.

#### **Recommendation 13**

That the NSW Government partner with the Ash Development Association of Australia and other interested parties, and support feasibility studies and pilot projects to assess and demonstrate commercial viability of new industries, such as transformation of coal ash into lightweight aggregate or other higher value-add products.

#### Government Response: Supported

The NSW Government will support trials for the innovative use of low-carbon recycled materials, such as cement made with coal ash, through a new funding program announced under the Waste and Sustainable Materials Strategy 2041. The NSW Government will consult with key stakeholders in the design of the program to ensure funding is targeted appropriately.

## **Recommendation 14**

That the NSW Environment Protection Authority ensure that the quantity of coal ash stored and produced, and the destination and purpose of coal ash reused, is publicly reported.

## **Government Response: Supported in principle**

The NSW Government will investigate options for reporting on coal ash reuse in NSW.

## **Recommendation 15**

That the NSW Government promote circular economy principles when dealing with coal ash waste and promoting reuse, including facilitating consultation between regulatory bodies, electricity generators and key stakeholders in recycling, local government and construction sectors.

## Government Response: Supported in principle

The Waste and Sustainable Materials Strategy 2041 signals the priority the NSW Government is placing on closing and reinforcing resource 'loops' in production processes and economic activity, while reducing carbon emissions. This includes commitments to encourage designing waste out of product manufacture, creating sustainable markets for low-carbon recycled materials, and driving change in industry practices and consumer behaviours.

The Strategy will also support industry to promote and trial the innovative use of low-carbon recycled materials generated from waste in the construction and manufacturing sectors through the \$37 million Carbon Recycling and Abatement Fund.

#### **Recommendation 16**

That NSW Treasury immediately publish on its website the baseline environmental studies conducted for each operating power station to improve transparency in terms of the NSW Government's liabilities for remediation at these sites.

## **Government Response: Supported**

NSW Treasury supports the publication of these environmental baseline studies to improve transparency on the NSW Government's liabilities for remediation at these sites. NSW Treasury will immediately publish the environmental baseline studies conducted for Vales Point, Eraring, Mt Piper, Bayswater and Liddell power stations. The AGL Macquarie Additional Pre-existing Contamination Studies report may be published subject to the outcome of an external Government Information (Public Access) review.

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