



Our ref: DW24/354

Ms Emily Suvaal MLC
Chair
NSW Standing Committee on State Development
Parliament of NSW

By email: State.Development@parliament.nsw.gov.au

Dear Chair

I refer to the NSW Standing Committee on State Development inquiry into beneficial and productive post-mining land use.

Please find enclosed the EPA's responses to the questions taken on notice during the hearing, 12 August 2024.

Thank you also for the opportunity to review the uncorrected transcript. I do not have any corrections or clarifications to the transcript.

Yours sincerely

TONY CHAPPEL
Chief Executive Officer
16 September 2024

Encl: Answer to transcript question

NSW Standing Committee on State Development - Inquiry into beneficial and productive post-mining land use

NSW EPA response to the question on notice (pages 3-4)

Ms ABIGAIL BOYD: I'm very glad to hear that. In which case, can we talk about the contaminated state of those sites? As I'm sure you'll be aware, in 2019 we conducted an inquiry into the contamination, namely the coal ash repositories, at each of those sites. There was a bunch of recommendations made in relation to not only rehabilitating and ensuring that there was a future for that land, but also in terms of assessing in great detail what the environmental and health impacts were. I understand most of those recommendations haven't been implemented yet. Could you give me an update on where we're actually at with identifying the extent of the damage and what is required to clean it up?

TONY CHAPPEL: I understand, actually, that most of them have been implemented. There are three or four—I will just get the latest for you, and perhaps we can come back to it in this session before we finish. The integrated environmental and health study around Lake Macquarie is well underway. There has been a lot of work done in terms of the water, the sediments and other things. The human health assessment, I understand, is progressing, but let me get you some detail on the outstanding items.

Ms ABIGAIL BOYD: That one is Lake Macquarie, and I understand that was slated beforehand. That's been part of a separate discussion. In terms of the environmental impacts around all of these sites—including those old sites like Tallawarra, where we know there is a huge amount of toxins leaching into groundwater—what has been done to assess the damage there?

TONY CHAPPEL: Specifically on the parliamentary inquiry's recommendations, I understand that almost all of those have been completed. I think there are a handful that are still in progress. I've just asked for the latest there and will happily share it in the session, or straight after if I don't have it by the end of the session.

Ms ABIGAIL BOYD: I know there was quite a delay in some of those sites being added to the contaminated land register. Are all of them on there now?

TONY CHAPPEL: Let me take that one on notice to make sure that I am fully accurate.

Ms ABIGAIL BOYD: I think the community has a lot of concerns that, in the very valid drive to create new jobs and turn these sites into other viable sites for industry, we might cover up what's happened underneath and not actually do the rehabilitation work that is required to take that coal ash out and put it into lined pits. Has consideration been given to that aspect?

TONY CHAPPEL: Certainly. A number of these legacy ash repositories, as you know, are not only not lined but they've also received other contaminated material over time in decades past. We do need to be careful about not creating any additional contamination as we seek to re-use and recycle that. There is quite significant work underway on using more contemporary coal ash now in low-carbon applications. There are a number of programs there working with the landholders for these sites, but some of the older sites are more challenging. Perhaps I will take that on notice as well and give a comprehensive answer on notice.

Ms ABIGAIL BOYD: That would be very useful, thank you. One of the more optimistic parts of that inquiry was a recommendation that the Government works with industry, community, unions and local councils—which sounds like a kind of transition authority—to grow that coal ash recycle and reuse industry. I understand that not much has been done on that either. Can you give us an update?

TONY CHAPPEL: Yes, and I will give you a full update on notice. The EPA has overseen two programs under our carbon abatement partnership program. One is with the coal ash recycling association and the other is, I think, with a part of the cement or concrete sector specifically. There's been some significant work done with the current operators of the power stations producing ash today as well. Let me get you a summary of that, if I may.

Ms ABIGAIL BOYD: Perhaps it's not quite at the scale of the recommendation, which was a New South Wales wide taskforce that would actually shepherd that industry into existence and ensure that there were good jobs for people on those sites. It's such a compelling industry switch when you can have these recycling plants onsite to reduce the burden of that coal ash as well as creating a new industry that's got lower-emission concrete and other types of construction products.

TONY CHAPPEL: I'm very happy to take the further particulars on notice as well. I'm sorry, I hadn't anticipated questions on coal ash from the power stations.

Answer:

The NSW Environment Protection Authority (EPA) is tracking the implementation of these recommendations and are providing updates as they become available.

Of the 16 recommendations, 11 are complete as of August 2024 (recommendations 1, 2, 4, 5, 10, 11, 12, 13, 14, 15 and 16):

- Rec 1: Dams Safety NSW and EPA Memorandum of Understanding.
- Rec 2: EPA establish air and groundwater monitoring around all power stations and coal ash dams and publish current, real time and historical data.
- Rec 4: EPA publishes breaches of environment protection licences.
- Rec 5: Power station owners publish dam safety standards compliance reports.
- Rec 10: That Transport for NSW reviews its procurement practices to, where feasible, mandate the use of recycled coal ash in government-funded transport infrastructure projects.
- Rec 11: Infrastructure NSW reviews its coal ash procurement practices.
- Rec 12: That Transport for NSW reviews the construction standards for roads, with a view to ensuring that local government trials the use of coal ash in its road construction.
- Rec 13: NSW Government partner with Ash Development Association of Australia and other interested parties to assess and demonstrate commercial viability of new industries.
- Rec 14: That the EPA ensures that the quantity of coal ash stored, produced and the destination and purpose of coal ash reused, is publicly reported.
- Rec 15: That the NSW Government promotes 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.
- Rec 16: NSW Treasury publishes baseline environmental studies for each operating power station.

Work in progress:

- In response to the inquiry recommendations, the EPA has engaged the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to conduct a monitoring project in Lake Macquarie to assess the current environmental condition and potential impacts of coal ash dams on the lake (recommendation 3 and 7).
- A report on surface water quality and sediment quality is expected to be finalised later in 2024 and will be released on the EPA's website.
- NSW Health is liaising with the EPA and DCCEEW on the finalisation of the Lake Macquarie and Lake Munmorah Conceptual Site Model report, which is an action resulting from recommendation 6.
- Work is underway to satisfy the intent of recommendations 8 and 9 through procurement and resource recovery initiatives under the Waste and Sustainable Materials Strategy.

The reason for any deviation between what was recommended and what has been or intended to be implemented is set out in the NSW Government response to the inquiry report and recommendations.

The NSW Government has committed \$3.25 million to support the beneficial reuse of coal ash in cement production. Currently there are a number of initiatives that the EPA are progressing to reduce carbon emissions and mitigate climate change by improving the management of materials.

On 17 October 2023, the EPA entered a memorandum of understanding with the Ash Development Association of Australia. This allows the NSW Government to leverage industry experience and knowledge to ensure project outputs are fit-for-purpose and will unlock genuine supply chain barriers, considering health and environmental risks.

Work has commenced on Stage 1 of the 'Coal Ash Pathways Research Partnership' the Ash Development Association of Australia have been engaged as the delivery partner. This project will increase the understanding of coal ash supply and applications to inform future works. The report from Stage 1 is due for completion March 2025.

NSW EPA response to the question on notice (page 9)

Ms ABIGAIL BOYD: We were talking before about rehabilitation of mining sites, and I'll come back again to coal-fired power stations. The remediation of pre-existing contamination at the time of privatisation is of course the responsibility of the Government. Because we have that joint responsibility for those sites once they come to decommissioning, what has been done so far by the Government in terms of planning for the required remediation works?

TONY CHAPPEL: We may need to take that one on notice. I'm very happy to do that. I think there is work under way at a number of the sites, but I couldn't give you the specifics off the top of my head. Unless—

DAVID GAINSFORD: No, I don't have anything else to add.

Ms ABIGAIL BOYD: I will be very interested in that answer.

Answer:

The EPA is committed to ensuring the safe management of coal ash from power stations to protect the community and the environment. We have a comprehensive framework in place to oversee the transition of coal-fired power stations, including their coal ash repositories, to future land uses. Each power station and its environmental context are unique, necessitating rigorous assessments of contamination or pollution to inform robust management and remediation measures.

Regarding the remediation of sites containing coal ash, the EPA is overseeing the NSW Government's implementation of the recommendations from the Public Works Committee's 'Inquiry into the costs for remediation of sites containing coal ash repositories in NSW'.

Our regulatory framework, enforced through environment protection licenses issued under the *Protection of the Environment Operations Act 1997*, includes strict limits on pollutant discharges and requires extensive monitoring of surface and groundwater at currently operating coal-fired power stations. This monitoring helps us understand the current environmental performance of these stations and their coal ash repositories, informing long-term management and remediation measures. Monitoring is conducted for the four operating coal-fired power stations in NSW: Bayswater, Mount Piper, Eraring, and Vales Point, and the results are publicly available.

Post-closure, the EPA will continue to regulate ash repositories through environment protection licenses or under the *Contaminated Land Management Act 1997* if a site is declared significantly contaminated, as seen with the former Munmorah and Kerosene Vale.

Additionally, the EPA plays a critical role in managing or remediating coal ash repositories by providing advice during the development assessment process for proposed future land uses, such as at the Liddell power station site.

The EPA also regularly engages with key stakeholders including community, NSW Treasury, power station operators and Generator Property Management (owners of both the former Munmorah Power Station and parts of the former Wallerawang power station premises) about management and remediation requirements for coal ash repositories.