

# Waste not, want not

Opportunities for the NSW Government to  
deliver for communities impacted by coal ash

## Acknowledgement

We acknowledge and pay our deep respects to the First Nations people of the land on which the coal-burning power stations and ash dams are located – the Wiradjuri, Wanaruah, Biraban and Darkinjung people. We pay our respects to their elders past and present. We acknowledge that First Nations people cared for country for tens of thousands of years with dignity and companionship and that despite colonisation, care for country continues unbroken. .

## About Environmental Justice Australia

Environmental Justice Australia is a not-for-profit public interest legal practice. Funded by donations and independent of government and corporate funding, our legal team combines a passion for justice with technical expertise and a practical understanding of the legal system to protect our environment.

We act as advisers and legal representatives to the environment movement, pursuing court cases to protect our shared environment. We work with community-based environment groups, regional and state environmental organisations, and larger environmental NGOs. We also provide strategic and legal support to their campaigns to address climate change, protect nature and defend the rights of communities to a healthy environment.

While we seek to give the community a powerful voice in court, we also recognise that court cases alone will not be enough. That's why we campaign to improve our legal system. We defend existing, hard-won environmental protections from attack. At the same time, we pursue new and innovative solutions to fill the gaps and fix the failures in our legal system to clear a path for a more just and sustainable world.

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## Executive summary

Coal-burning power stations in New South Wales (NSW) generate approximately 4.8–5.5 million tonnes of coal ash annually.<sup>1</sup> Coal ash, which is the residual waste produced from burning coal, is disposed of into emplacement facilities, or ‘coal ash dams’, at each coal-burning power station.

For the past five years, there has been a growing awareness of the significant contamination risks presented by NSW coal ash dams and the failure by both government and industry to properly manage these risks. This has resulted in an increasing number of reports documenting the environmental impacts of coal ash from NSW power stations and the existing failures of coal ash regulation and remediation.<sup>2</sup> To date, the community, with the support of Environmental Justice Australia, has pioneered this work.

Sustained campaigning by community environment groups and Environmental Justice Australia led to the NSW Legislative Council announcing an inquiry into coal ash waste in October 2019 (Inquiry).<sup>3</sup> This was a significant win for affected communities and advocates, who finally had the opportunity to shine some much-needed light on the opaque coal ash regulatory regime and obtain clarity and understanding of how the NSW Government, regulators

and industry manage coal ash waste both now and into the future.

From February 2020, the NSW Public Works Committee (Committee) inquired into the costs of remediating coal ash dams at Mount Piper, Bayswater, Liddell, Vales Point and Eraring power stations, including the:

- prospective timing of government expenditure in relation to the remediation of ash dams;
- economic and employment opportunities associated with coal ash re-use, site remediation and repurposing of land;
- adequacy and effectiveness of the current regulatory regime for ensuring best practice remediation of coal ash dams;
- mitigation of actual or perceived conflicts of interest arising from the NSW State having ongoing liability for ash dam remediation costs, the quantum of which will be impacted by government policy and regulatory action; and
- risks and liabilities associated with inadequate remediation, including community and environmental health impacts.

Three days of public parliamentary hearings were held in September to October 2020. Community health and environment groups, government agencies (such as the NSW Environment Protection Authority (EPA), Dams Safety NSW and NSW Treasury), regulatory experts and industry gave evidence at the hearings. As part of the Inquiry the NSW Government acknowledged that contaminated sites such as coal ash dams ‘may threaten human health and the environment, limit land use or increase development costs’.<sup>4</sup>

The Committee’s Final Report was released on 22 March 2021 (Final Report).<sup>5</sup> The Final Report made 16 recommendations,

<sup>1</sup> Public Works Committee, New South Wales Legislative Council, *Costs for remediation of sites containing coal ash repositories* (September 2020), 37.

<sup>2</sup> Environmental Justice Australia, *Unearthing Australia’s toxic coal ash legacy* (July 2019) <[https://www.envirojustice.org.au/wp-content/uploads/2019/07/EJA\\_CoalAshReport-Ir.pdf](https://www.envirojustice.org.au/wp-content/uploads/2019/07/EJA_CoalAshReport-Ir.pdf)>; Hunter Community Environment Centre, *Out of the Ashes: Water pollution and Lake Macquarie’s aging coal-fired power stations* (February 2019) <[https://static1.squarespace.com/static/5e22ffdfa732e601799afb2/t/5e3224a41e28eb2e4b050057/1580344643751/REPORT\\_Out\\_of\\_the\\_Ashes\\_HCEC-compressed.pdf](https://static1.squarespace.com/static/5e22ffdfa732e601799afb2/t/5e3224a41e28eb2e4b050057/1580344643751/REPORT_Out_of_the_Ashes_HCEC-compressed.pdf)>; Hunter Community Environment Centre, *Out of the Ashes II: NSW water pollution and our aging coal-fired power stations* (October 2020) <[https://static1.squarespace.com/static/5e22ffdfa732e601799afb2/t/5f962ea21d206d227a96ba32/1603678044609/Out-of-the-ashes-II\\_final-min.pdf](https://static1.squarespace.com/static/5e22ffdfa732e601799afb2/t/5f962ea21d206d227a96ba32/1603678044609/Out-of-the-ashes-II_final-min.pdf)>.

<sup>3</sup> Public Works Committee, New South Wales Legislative Council, *Costs for remediation of sites containing coal ash repositories* (October 2019) Parliament of New South Wales <<https://www.parliament.nsw.gov.au/committees/inquiries/Pages/inquiry-details.aspx?pk=2556#tab-terms-of-reference>>.

<sup>4</sup> Public Works Committee, New South Wales Legislative Council, above n 1, 3 [1.11].

<sup>5</sup> Public Works Committee, New South Wales Legislative Council, above 1.



all of which Environmental Justice Australia broadly supports. The NSW Government must respond to the findings and recommendations contained in the Final Report by 22 September 2021.

This paper considers four of the 16 recommendations that are deemed to be most critical to securing tangible, measurable outcomes for the community, including improved management and remediation of coal ash dams and better health and environmental outcomes for the community. They are:

- *That NSW Health immediately undertake an epidemiological assessment of the health of residents near coal ash dams to establish health impacts of coal ash and publish by 31 December 2022 (Final Report Recommendation 6).*<sup>6</sup>
- *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 (Final Report Recommendation 7).*<sup>7</sup>
- *That the Department of Planning, Industry and Environment establish a coal ash reuse taskforce comprised of 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 (Final Report Recommendation 8).*<sup>8</sup>
- *That the newly established coal ash reuse taskforce inquire into and review regulations affecting coal ash reuse, including:*
  - o *the stability and regulation of ash dams*
  - o *waste standards to ensure that coal ash is not contaminated with other waste, and*
  - o *land remediation, including the state and effectiveness of current capping, the current and future risk 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 (Final Report Recommendation 9).*<sup>9</sup>

This paper outlines how the Government should implement the above recommendations to ensure best-practice assessment of the environmental and human health impacts of coal ash dams and best practice community engagement in the ongoing management and remediation of coal ash dams.

Based on the evidence and findings of the Inquiry and further information contained in this paper, this paper makes the following recommendations.

#### Recommendation #1

That the NSW Government adopt **Final report Recommendation 6** and support NSW Health to undertake an epidemiological assessment of the health of residents living near coal ash dams.

#### Recommendation #2

That the NSW Government adopt **Final Report Recommendation 7** and empower the NSW EPA to undertake a comprehensive assessment of the environmental impacts of coal ash dams.

#### Recommendation #3

That the EPA's assessment encompass:

- a. hydrogeological and ecotoxicology studies, modelling and assessment at each coal ash dam site; and
- b. assessment and evaluation of the leaching behaviour of coal ash residuals.

#### Recommendation #4

That the EPA's assessment be prioritised, resourced, and publicly available at its conclusion, including all data and findings.

#### Recommendation #5

That the EPA's environmental assessment inform the development of guidelines outlining requirements for ongoing, closure and post-closure best practice remediation.

#### Recommendation #6

Where environmental issues are detected, that the EPA expedite the implementation of site-specific remediation plans to manage environmental issues for operational ash dams.

#### Recommendation #7

That the NSW Government adopt **Final Report Recommendation 8** and **Final Report Recommendation 9** and direct that the Department of Planning, Industry and Environment establish the Taskforce and that the Taskforce be empowered to inquire into and report on a range of factors affecting coal ash reuse.

#### Recommendation #8

That community engagement principles be embedded in the Taskforce to ensure environmental decision-making is participatory and effective. Accordingly, the Taskforce must be representative, coordinated, transparent, accountable, well resourced and accessible – including proactively facilitating access to information.

<sup>6</sup> Ibid 33.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid 56.

<sup>9</sup> Ibid.

## 1. Call for assessment of environmental and human health impacts of NSW coal ash dams

*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 (Final Report Recommendation 6).*

*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 (Final Report Recommendation 7).*

To date, there have not been comprehensive assessments of the human health and environmental impacts of coal ash pollution in NSW. This is despite community concern about possible health impacts<sup>10</sup> and known contamination issues in Lake Macquarie and other locations.<sup>11</sup> The community welcomed the Committee's recommendations that NSW Health undertake an epidemiological assessment of the health of residents living near coal ash dams and that the EPA commission a comprehensive and independent assessment of environmental impacts. They should be adopted by the Government.

In its Final Report, the Committee acknowledged community concern and lack of research on these issues and noted that it was:

‘...disappointed with the response by the NSW EPA and NSW Health to community concerns about a potential link between the circulation of additional metals in the air and waterways, and impacts on health outcomes for the community. This response, in conjunction with the lack of research conducted to date on this matter, demonstrates a complete disregard by the government towards the health of its citizens...we are frustrated by the responses of the NSW EPA to health and environmental concerns voiced by the community.’<sup>12</sup>

NSW Health did not give evidence at Inquiry hearings, nor does it appear to have substantively contributed to the NSW Government's written submission to the Inquiry. Inquiry witnesses noted that it was unclear to what extent residents living near coal ash dams had been surveyed in relation to their health.<sup>13</sup>

During Inquiry hearings, the EPA indicated that it was working with NSW Health with regard to community

concerns about the perceived link between coal ash dams and health conditions experienced in the community<sup>14</sup> however, the extent and frequency of consultation between the EPA and NSW Health is not publicly known.

In order to address community concerns and fill research gaps, it is incumbent on the Government to adopt Recommendation 6 and support NSW Health to undertake an epidemiological assessment of the health of residents living near coal ash dams. The epidemiological assessment must be appropriately designed and resourced to ensure its completion and public availability by 31 December 2022.

In evidence it gave during Inquiry hearings and in subsequent statements, the EPA indicated that it is committed to undertaking a comprehensive assessment of the environmental impacts of coal ash dams.<sup>15</sup> It stated that it has begun scoping a study into the potential impacts, including the specific impacts of coal ash dams on groundwater.<sup>16</sup> The Government should formalise the EPA's commitment by adopting Recommendation 7 and empowering the EPA with adequate funding to conduct the assessment in a timely manner.

### Recommendation #1

**That the NSW Government adopt Final Report Recommendation 6 and support NSW Health to undertake an epidemiological assessment of the health of residents living near coal ash dams.**

### Recommendation #2

**That the NSW Government adopt Final Report Recommendation 7 and empower the NSW EPA to undertake a comprehensive assessment of the environmental impacts of coal ash dams.**

#### 1.1 What the EPA's environmental assessment should encompass

In 2015, the United States (US) EPA created national regulations for coal ash disposal in the United States – the Hazardous and Solid Waste Management System – Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule).<sup>17</sup> Prior to the CCR Rule, ash dam management under state regulatory programs, supposed to fill other federal regulatory gaps, were found to be insufficient by the US EPA to protect land, water and communities living near ash dams.

The CCR Rule has been amended since its first introduction and remains in force today. It establishes minimum national criteria for ash dams, surface impoundments, and all expansions of ash dams including location restrictions, liner

<sup>14</sup> Ibid [3.31].

<sup>15</sup> NSW Environment Protection Authority, *News Round: EPA commits to investigating coal ash dam impact* (October-November 2020) NSW Environment Protection Authority < <https://www.epa.nsw.gov.au/newsletters/epa-connect-newsletter/october-november-2020/news-round> >.

<sup>16</sup> Evidence to Public Works Committee, New South Wales Legislative Council, Sydney, 16 October 2020, 44-45 (Mr David Fowler).

<sup>17</sup> *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, 40 CFR § 257 and 261 (17 April 2015).

<sup>10</sup> Ibid 24-25.

<sup>11</sup> Ibid 27-29; 31-32; and Evidence to Public Works Committee, New South Wales Legislative Council, Sydney, 16 October 2020, 43-44 (Mr Adam Gilligan).

<sup>12</sup> Public Works Committee, New South Wales Legislative Council, above 1, 32-33.

<sup>13</sup> Ibid 26 [3.27].



design criteria, structural integrity requirements, operating criteria, groundwater monitoring and corrective action requirements, closure and post closure care requirements, recordkeeping, notification, and internet posting requirements. It also seeks to address the risks presented by unlined coal ash dams by establishing a deadline for unlined coal ash dams to initiate closure and stop receiving waste.<sup>18</sup>

The processes involved in the development and continuing application of the CCR Rule provides a good starting model for the actions and matters that should be considered by the NSW EPA in its assessment of NSW coal ash dams.

The CCR rule was informed by the US EPA undertaking an assessment of over 230 coal ash dams in the US.<sup>19</sup> This involved the US EPA obtaining, reviewing and assessing the following types of information for the coal ash dams:

- hydrological and geohydrological studies and assessments for surface water and groundwater, including potentiometric maps and groundwater modelling, to determine seepage behaviour and impacts;
- ecotoxicology studies and trophic modelling and assessment using sediment, soil, surface water and biological data and samples, to determine the distribution of pollutants in the environment and contaminant levels within ecosystems and receptors; and
- information and analysis on the leaching behaviour of coal ash residuals, to evaluate the leach rates of toxic coal ash constituents and the risks to the environment posed by these.

It is suggested that at a minimum, the NSW EPA's assessment of coal ash dams includes the above matters on a site-by-site basis for each coal ash dam in NSW.

The NSW EPA assessment must be appropriately prioritised and adequately funded. The assessment must be concluded in a timely manner and, if environmental impacts are found to be occurring, must result in the expedited development of remediation plans to ensure issues are addressed during current coal ash dam operations. In addition, all data, findings and recommended outcomes from the EPA assessment should be made available to the public at the conclusion of the investigation.

#### Recommendation #3: That the EPA's assessment encompass:

- a. hydrogeological and ecotoxicology studies, modelling and assessment at each coal ash dam site; and
- b. assessment and evaluation of the leaching behaviour of coal ash residuals.

#### Recommendation #4

That the EPA's assessment be prioritised, resourced, and publicly available at its conclusion, including all data and findings.

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<sup>18</sup> Ibid 21303.

<sup>19</sup> Ibid 21313.





## 1.2 EPA assessment to inform best practice coal ash dam remediation and closure planning

The EPA's assessment must inform best practice remediation. This includes ongoing remediation of operational coal ash dams and closure and post-closure remediation requirements.

Currently, the NSW Government does not require operators of NSW coal ash dams to have comprehensive ongoing and closure and post-closure remediation plans. This means that effectively, clean-up of coal ash dams is deferred until power stations close. This presents significant environmental and financial risks, including:

- that ash dams in contact with underlying groundwater may contaminate water by leaching chemicals and heavy metals until such a time as they are properly remediated;
- that deferment of the development of detailed remediation plans defers costing and expenditure on remediation, which may give rise to unexpected remediation costs incurred in the future;
- that deferment of remediation costs may result in liable parties being unable to afford remediation in the future, with the community and taxpayer having to bear the costs instead; and
- that deferment of remediation requirements until such a time as the site is no longer used in connection with energy-generation may present an indefinite, ongoing environmental risk.

Recent communications by power station operators suggest that the conversion of existing coal-burning power station sites to 'energy hubs' 'may defer remediation requirements'.<sup>20</sup> This proposed repurposing of land indicates that the concept of asset 'closure' is nuanced. The introduction of the concept of repurposing also demonstrates the importance of requiring comprehensive remediation plans in advance of asset repurposing or closure to reduce, as far as possible, those risks listed above.

Once finalised, the EPA's assessment should inform the development of standardised best practice remediation guidelines for NSW coal ash dams, which so far, do not exist.

Remediation guidelines should outline standard actions required to progressively address existing contamination issues while ash dams remain operational, as well as actions designed to manage ongoing future risks during closure and post-closure operations.

The actions and matters outlined below for 'ongoing remediation' and 'closure and post-closure remediation' are akin to those required by the US EPA's CCR Rule. These actions and matters should be included in standardised best practice remediation guidelines to be devised by the NSW EPA.

<sup>20</sup> AGL Energy Limited, 'Confirmation of intention to demerge, announcement of dividend actions and affirmation of earnings guidance' (ASX and Media Release, 30 June 2021) 16.



### 1.2.1 Ongoing remediation of operational ash dams

Coal ash dams in NSW are not lined to effectively mitigate against groundwater contamination. This is despite their proximity to sensitive, water-receiving environments such as Lake Macquarie, the Hunter River catchment and the Cox's River, which forms part of Sydney's drinking water catchment.

The recent approval to expand the Eraring Power Station ash dam did not require the ash dam to be lined as a condition of development consent.<sup>21</sup> Similarly, the proposed Bayswater Power Station ash dam expansion does not consider progressive rehabilitation actions that should be applied to the proposed expanded sections of the ash dam.<sup>22</sup> If best practice remediation guidelines for operational coal ash dams existed, decision-makers would be required to consider these when making decisions related to coal ash dams. Guidelines would provide a clear framework to achieve ongoing best practice management and remediation.

Actions that could be taken to achieve ongoing best practice management and ongoing remediation of operational coal ash dams, which ought to be included in the EPA's guidelines, include:

- keeping ash dry, wherever possible, in the first instance and maintaining appropriate controls for dust emissions;
- lining ash dams, including operational ash dams and proposed ash dam expansions, with an impermeable liner;
- undertaking comprehensive groundwater monitoring systems and requiring contamination remediation where it is occurring, including the following actions:
  - o immediately notifying regulatory authorities and the public about ongoing or discrete contamination incidents;
  - o working with authorities to determine appropriate and timely remedial action to restore groundwater or surface water to pre-contamination conditions; and
  - o engaging the surrounding community and ensuring transparency in clean-up responses, including reporting on progress of clean-up; and
- undertaking regular structural integrity checks;
- ensuring detailed, strict and enforceable environment protection licence conditions apply to ash dam operations, including conditions seeking further studies, reports or investigations be undertaken, such as pollution reduction studies and programs;<sup>23</sup>
- ensuring transparency of information, including the availability of monitoring data and reports and

community updates via formal processes (such as Community Consultative Committees); and

- preparing comprehensive closure and post-closure plans in advance of decommissioning.

The above actions should be undertaken in a number of circumstances, for example when assessing proposed ash dam expansions, when making planning decisions about the repurposing of land on which the ash dam is located and when environmental protection licence conditions are being assessed or reviewed.

The lack of existing remedial actions required to be undertaken by operators between now and the eventual decommissioning of power stations highlights the inadequacy of existing regulatory frameworks – frameworks that could be developed and informed by the EPA's assessment.

### 1.2.2 Closure planning and remediation of ash dams in decommissioning stage

As noted above, best practice management and ongoing remediation of operational coal ash dams involves preparing for closure and post-closure stages ahead of time.

Generally, best practice remediation of coal ash dams entering closure and post-closure stages ought to encompass the following actions and matters.

- A comprehensive corrective action plan is developed in partnership with the community that includes:
  - o detailed descriptions of the ash dam and surrounding area (site characterisation);
  - o extensive detail of the remedial action to prevent ongoing contamination of groundwater, surface water, air and land;
  - o requirements for quarterly community reports and feedback on process;
  - o assessment of the contamination levels and composition of contaminants;
  - o detailed chemical analysis of the ash;
  - o hydrogeological reports and maps;
  - o groundwater and surface water monitoring data for the previous 10 years;
  - o triggers for remedial action in the event of exceedances identified at monitoring points including groundwater, surface water, air and structural integrity monitoring points; and
  - o requirements for timely public safety announcements.
- Coal ash reuse strategies, plans and commitments are developed.
- Comprehensive water quality modelling is available that estimates:
  - o how quickly groundwater/surface water contamination will improve;
  - o how much contamination is expected to enter water sources; and

<sup>21</sup> New South Wales Independent Planning Commission, 'Statement of reasons for decision: Eraring Ash Dam Major Project Modification Assessment 07\_0084 MOD 1' (23 December 2019).

<sup>22</sup> Jacobs Group (Australia) Pty Limited, 'Bayswater Water and Other Associated Operational Works Project: A1215400\_Bayswater WOAOW EIS Final' (4 June 2020) <<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9697%2120200609T062617.698%20GMT>>.

<sup>23</sup> *Protection of the Environment Operations Act 1997* (NSW) s 68.

- o a prediction for the effect of pollution control measures including removal of contaminated materials.
- A strict time limit is set within which closure and post-closure plans must be prepared and implemented.
- A closure plan is agreed that is enforceable by both the environmental regulator and the community including the following elements:
  - o conditions of compliance are clear and have time frames for compliance;
  - o community enforcement actions are available to ensure the plan is followed strictly; and
  - o mechanisms that allow companies to bypass their obligations without thorough explanation, allow time to lapse without having implemented rehabilitation within a strict time period, and/or waive rehabilitation requirements by deferring to reports such as third-party engineering reports, must be removed.
- The operator is required to provide a financial assurance to the NSW EPA before closure and post-closure remediation and rehabilitation takes place.<sup>24</sup> Financial assurance details, including amounts, are publicly available.
- The impact of the ash dam's contaminants in water, surface water, air and land are detailed, as are the environmental and human health impacts of these contaminants.
- There are detailed descriptions of a long-term monitoring program (at least 30 years) funded by the operator that include:
  - o groundwater monitoring systems;
  - o remedial actions to restore groundwater to original conditions where contamination continues or in the event that contamination is discovered post-closure; and
  - o ash dam cap inspection and cap maintenance.
- All documents related to ash dam rehabilitation are publicly available, preferably on a publicly accessible website, including:
  - o monitoring data;
  - o reports used to develop the corrective action plan;
  - o the final corrective action plan;
  - o communications between the ash dam operator and regulators overseeing the rehabilitation and closure plan;
  - o any penalty infringement notices or court orders issued for non-compliance; and
  - o all community update reports.

It is acknowledged that remediation of coal ash dams during closure and post-closure stages will vary between ash dams depending on a range of local factors, however the above framework provides a clear basis for the development

of more detailed site-specific plans informed by clear, overarching standardised remediation guidelines.

The Government must adopt Final Report recommendation 7 to empower the EPA to conduct a thorough assessment of NSW coal ash dams and work to devise comprehensive guidelines setting out the standard requirements for best practice remediation and management of NSW coal ash dams throughout their operational and closure stages.

#### **Recommendation #5**

**That the EPA's environmental assessment inform the development of guidelines outlining requirements for ongoing, closure and post-closure best practice remediation.**

#### **Recommendation #6**

**Where environmental issues are detected, the EPA expedite the implementation of site-specific remediation plans to manage environmental issues for operational ash dams.**

<sup>24</sup> Ibid s 298.

## 2. Best practice community engagement and public participation

*That the Department of Planning, Industry and Environment establish a coal ash reuse taskforce comprised of 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 (Final Report Recommendation 8).*

*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 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 (Final Report Recommendation 9).*

As noted above in this paper, best practice coal ash dam remediation must include best practice community engagement.

The community must be given the opportunity to contribute to and participate in environmental decision-making, especially communities that live close to sources, or possible sources of contamination and pollution. Community involvement is critical to ensure that forward planning and environmental decisions are made to thoroughly protect environmental and community health. These principles were enshrined in international law about 30 years ago in the *Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters* (Aarhus Convention).<sup>25</sup>

Communities in NSW deserve the opportunity to participate in planning for coal ash dam remediation as part of the coal ash reuse taskforce (Taskforce). We therefore strongly encourage the NSW Government to adopt Final Report Recommendations 8 and 9 to guarantee that community representatives have the opportunity to participate in discussions involving remediation and the current management of coal ash dams, including a coal ash reuse strategy linked to remediation.

This section of this paper highlights the best practice community engagement principles that must underpin the implementation of the Taskforce and how the Taskforce should be designed to reflect the principles.

### Recommendation #7

**That the NSW Government adopt Final Report Recommendation 8 and Final Report Recommendation 9 and direct that the Department of Planning, Industry and Environment establish the Taskforce and that the Taskforce be empowered to inquire into and report on a range of factors affecting coal ash reuse.**

<sup>25</sup> *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, opened for signature 25 June 1998, 2161 UNTS 447 (entered into force 30 October 2001).





## 2.1 The Aarhus Convention on public participation in environmental decision making

The Aarhus Convention outlines what best practice public participation in environmental decision-making must involve. It is founded on the notion of participatory democracy and aims to protect both environmental and human rights by ensuring that the principles of access to information, public participation, and access to justice is embedded in environmental planning and decision-making.

The Aarhus Convention principles are summarised below.

### AARHUS CONVENTION PRINCIPLES<sup>26</sup>

PRINCIPLE	BEST PRACTICE PUBLIC PARTICIPATION
Access to information	The public must be able to request, and be provided with, information about the environment from public authorities. Public authorities are also obliged to collect and publish information, of public interest (such as water monitoring and environmental management plans) without the need for the public to specifically request it.
Public participation	Access to accurate and up-to-date information is fundamental to proper public participation. There are three parts to public participation. First, public participation for people who may be affected by or interested in decisions related to an activity – such as the ability to comment on a proposed coal ash dam remediation plan or power station licence amendment. Secondly, public participation in the development of plans, programmes and policies related to the environment, such as ash dam management plans. Finally, the public should be involved in the preparation of laws and rules.
Access to justice	Public participation must occur without obstruction. The community must have an enforceable right to access information through review processes for denials of access to information. The community must also have review rights regarding a decisions made about the environment or developments that impact it. This is a way for the public to directly enforce environmental law.

Although Australia is not a signatory of the Aarhus Convention, its principles have been considered by Australian courts.<sup>27</sup> Government decision makers should therefore elect to consider the Aarhus principles when making decisions with respect to the environment to ensure their integrity.

The closure of Myuna Bay Sports and Recreation Centre in 2019 provides an example of inadequate community consultation on an environmental and human health and safety decision. Adoption of the Aarhus principles could have avoided community distrust and anger surrounding the closure.

<sup>26</sup> Ibid art 4.1; art 5; art 6; art 7; art 8; art 9.1.

<sup>27</sup> See *Caroona Coal Action Group Inc v Coal Mines Australia Pty Ltd (No 3)* [2010] NSWLEC 59.

## 2.2 Why community engagement and public participation are part of best practice remediation

Best practice remediation of coal ash is intrinsically tied to best practice community engagement. The community must be given the opportunity to contribute to and participate in decision-making about remediation, including how a coal ash reuse industry can benefit and promote remediation outcomes.

- Ongoing public engagement and consultation on remediation plans would serve several purposes. It would:
- increase transparency of decision-making, enabling smoother implementation of decisions and enforcement;
- result in accountability for decision-makers;
- capture local knowledge and adequately address broader community concerns; and
- deliver solutions that suit the needs of the community (for example, the creation of jobs through coal ash reuse) and are therefore more likely to work.

If public participation is properly conducted, communities that are directly impacted by coal ash pollution will be empowered to contribute their ideas to how it is managed and remediated on an ongoing basis. This will ensure social, environmental, health and economic benefits are generated for the very communities that have borne the impacts of coal ash for decades. Effectively, by embedding public participation in environmental decisions related to the reuse of coal ash and the remediation of coal ash dams, it will help secure a just transition for communities closest to coal-burning power stations.

## 2.3 Embedding community engagement principles in the Taskforce

Community engagement is not a panacea to ensure that all parties are happy. Ineffective or tokenistic community consultation is likely to be detrimental to the good faith of the community in the long term.

The proposed Taskforce is a good first step to ensuring that community consultation is embedded in environmental decision-making for coal ash dams.

To ensure that the Taskforce is robust, transparent and participatory, it must be designed to incorporate the Aarhus Convention principles and other relevant principles. Accordingly, the Taskforce must be:

- representative – the Committee recommends that the Taskforce comprise of government, industry, union, and community representatives. We support the representation of each of these sectors on the Taskforce.
- participatory – the principles of public participation in environmental decision-making should be reflected in all major decisions made by the Taskforce. This includes consulting with the community via public exhibition processes, workshops and information meetings.

## CLOSURE OF MYUNA BAY SPORTS AND RECREATION CENTRE: A CASE STUDY OF WORST-PRACTICE COMMUNITY ENGAGEMENT

In March 2019, the Myuna Bay Sports and Recreation Centre was suddenly closed due to fears the nearby coal ash dam at Eraring Power Station could pose a risk in the event of an earthquake. The facility had been enjoyed by the community since 1944 and employed 20 staff.

After commissioning engineering reviews, which found that the facility was not safe ‘due to the serious potential risk to clients and staff arising from the potential failure of Eraring Power Station’s ash dam wall in the event of major seismic activity’, Origin Energy contacted the NSW Office of Sport and recommended the facility be closed. The Office of Sport made a decision to close the facility during the caretaker period in the lead up to the 2019 NSW election. The facility was permanently closed in December 2019, following a further independent assessment.

The decision to close the facility raised significant questions about the lack of community consultation and transparency in decision-making and the ongoing risks to the broader Lake Macquarie community from the Eraring Power Station ash dam.

In March 2021, the coal ash Inquiry found that the decision-making process to close Myuna Bay Sport and Recreation Centre was made with no transparency and with inadequate community consultation by Origin Energy, Dams Safety NSW and the Office of Sport.

The process undertaken to close Myuna Bay Sports and Recreation Centre is a clear example of worst-practice community consultation – one that seeded community anger and distrust at how NSW coal ash dams have been and continue to be managed.

Governments must avoid future processes of this kind.

- coordinated – the Taskforce must have a clearly developed mandate and a defined mission. For example, the Taskforce should be clearly focussed on developing a strategy to achieve 80% reuse of coal ash produced in NSW that considers, and is informed by, best practice remediation objectives. It must be capable of delivering on its goals, including the public participation activities necessary to do so in a consultative way.
- transparent and accessible – the Taskforce must proactively provide access to information, including information on its mandate, goals and deliverables. Information relied on by the Taskforce for decision making must be made public wherever possible.
- accountable – the Taskforce must be able to provide access to information review processes that allow persons to enforce their rights to access information. It must also be required to deliver publicly available progress reports, which outline its progress to delivering on its goals
- resourced – the Taskforce must be adequately resourced and have dedicated funding that extends beyond interim reporting dates. Representatives participating in the Taskforce must be well-resourced and appropriately skilled to meaningfully contribute.

Best practice coal ash dam rehabilitation is directly tied to best practice community engagement. Impacted communities must have the opportunity to contribute to and participate in decision-making and they must have resources and access to information to do so. That is, they must have a seat at the table.

The Inquiry and Final Report made it clear that, to date, best practice community engagement on coal ash dams has not occurred in NSW. It is vital that trust between the community, industry and government be established through a transparent and accountable Taskforce.

### **Recommendation #8**

That community engagement principles be embedded in the Taskforce to ensure environmental decision-making is participatory and effective. Accordingly, the Taskforce must be representative, coordinated, transparent, accountable, well resourced and accessible – including proactively facilitating access to information.







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