

**Submission  
No 4**

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

**Organisation:** Coal-ash Community Alliance Inc.

**Date Received:** 27 January 2020

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**Submission to the Legislative Council's**

**Public Works Committee**

***Inquiry into the cost for remediation of sites containing  
coal ash repositories (2019)***



**Vales Point Coal ash Dam from the Pacific Highway Doyalson NSW**

## **Introduction:**

### **ERARING, VALES POINT, LAKE MUNMORAH:**

It is apparent that the inquiry into the costs of remediating NSW coal ash repositories at Eraring and Vales Point power stations and others is well overdue. The power stations when first built, some fifty years ago, were surrounded by bushlands and had mostly weekenders and fishing shacks in close proximity.

Over the past five decades, the planning process has allowed development after development in the surrounding suburbs, mostly individual homes, yet things are dramatically changing with estates of up to 600 homes. The area has been riddled with mine subsidence issues and surprisingly recently has had areas lifted from the subsidence regions without any explanation to the community.

Today we have the Central Coast Regional Plan 2036, the Lake Munmorah Greater Strategic Plan & the proposed Urban Spatial Plans, all of which effectively are increasing the northern Central Coast region alone by approximately 101,000 new residents through the identification of 40,500 new residential dwellings in the Plans.

As part of the Central Coast Regional Plan 2036 we also have the proposal of mineral extractions in the same region to the tune of some \$180 Million per annum. The same could be said of the lower Lake Macquarie region, which is also in the eyes of developers again without considering the hidden legacies of five decades of burning coal and dumping the toxic bi-product in unlined, fifty five year old dams in both regions.

One ash dam that has been totally forgotten in all this planning is the ash dam of the former Lake Munmorah power station, which has been connected to PFAS and asbestos contamination. Yet this ash dam has had very little scrutiny, especially during its decommissioning, a process governed again by self-regulation.

The closure of the Myuna Bay Recreational Centre has highlighted the need for greater independent scrutiny, especially considering proposals to increase the capacity and size of the Eraring dam and to play around with disused mines beneath the massive coal ash deposits. Reports of contaminated sea creatures and human health warnings limiting consumption of fish caught in the lakes is testimony to how big the issue really is.

It is extraordinary that the fracture and sheer number of government departments are unable or refuse to communicate with each other and more importantly with the general community, which in itself is a major problem. Ignorance due to the lack of communication means that taxpayer's money is spent unnecessarily. Yet worse, decisions are made without the full information, which is leading to dangerous results and the community then has to live with the consequences.

Professional fishing was banned in 2002, yet recreational fishing is encouraged. The NSW Department of Primary Industries website “Go Fishing” describes Lake Macquarie and Lake Munmorah as recreational fishing havens consisting of artificial reefs. It has the audacity to continue to charge a recreational fishing fee for the privilege of catching contaminated species and of potentially creating human health issues due to the contaminants flowing from the ash dams.

The lakes are riddled with fishing closures and restrictions at environmental hot spots to the south such as Mannering Bay, Muddy Lake, Duck Hole Lagoon, Whitehead Lagoon, Colongra Bay and the obvious power station outlets to name a few. Yet the D.P.I. spruiks the following under the heading of Commercial Fishing “The health benefits of seafood are well known and the industry is rising to the challenge of ensuring that fresh seafood is available not just on the coast, but throughout NSW”.

In March 2019 ABC News reported studies on Mud Crabs caught in Lake Macquarie. It took a Freedom of Information request to the Environmental Protection Authority to find that bottom dwelling organisms are absorbing cadmium in the sediment to such an extent that it is becoming unhealthy to eat crabs.

The lack of transparency from both government and the operators has all regional communities reaching a boiling point at which the issue is becoming a major political storm for all levels of government.

The repetitive term promoted by the Environmental Protection Authority (EPA), ‘*beneficial use of ash*’, is viewed by environmentalists and the community alike, as exonerating or even supporting gross ineptitude by State governments of the early 1960s and into the 1980s.

Those in high office and others serving the public when Vales Point, Eraring and Lake Munmorah power stations were in the planning stages made decisions wholly based on the simplest and cheapest method of coal ash disposal. A solution which allowed public owned and operated power generation to rise on the crest of a toxic dump of its own making.

**The Eraring Ash Dam modification Assessment Report** (September 2019) quotes on page 4,

“Under the Minister’s delegation of 28 September 2011, the Independent Planning Commission will determine the modification application as ***Origin Energy has declared reportable political donations***”. The community can only assume that there is more to what has happened over the decades through ongoing political donations to parties with ulterior motives or a conflict of interest and not in the interest of the surrounding communities.

Even though the Eraring Ash Dam modification Assessment Report (2019) and recent approval had looked at an increase of surface area of 10 hectares and a further holding capacity of some 5 Million cubic metres of coal ash, which inevitably places extreme pressures on the dam walls. Having the expansion does nothing to reduce the storage of coal ash, its impacts or how these dams are to be remediated.

Having NO Community consultation has seen the general community unable to obtain the answers to why the government had closed the Myuna Bay Recreational Camp under the threat of an earthquake, yet still do not know the actual reasons for the instability of the walls either through internal erosion, concentrated leak, backward erosion suffusion or a combination of all and to whether filter traps are to be installed?

***Prospective timing of government expenditure in relation to remediation at the sites:***

Now is the time for government expenditure to solve the growing toxic issues within the region, as the government has been well aware of the environmental and potential human health issues from the storage of coal ash for decades. There is well over 60 Million tonnes of stored coal ash between the Eraring and Vales Point dams alone.

With Eraring producing a further 1.34 Million tonnes per annum and Vales Point an additional 0.55 Mt per annum, there is a potential of some 97.8 Million tonnes of stored coal ash over the lifespan of the power stations during the next twenty years. This does not include the sleeping giant of the Lake Munmorah power station site. If now is not the time to reduce this massive burden, then when will it be time?

History shows that the reason why Lake Munmorah power station has minimum coal ash storage is because of two reasons. The first reason is that it too used Vales Point ash dam for several of its twilight years. However the second reason appears to be less well known.

In 1962 tests by sixty commissioned scientists showed the sea to be an ideal ash dump, and hundreds of tons of fine ash were indeed dumped off Wybung Head, now part of the Lake Munmorah Conservation Area.

An Electricity Commission official said that most of the ash remained suspended in deep water without settling. **“We now know that 8,000 tons of ash a week from powerhouses – a problem until now – can be safely dumped at sea”, the official said.**

(Blue Gum Flat to Budgewoi by Charles Swancott, Fellow Brisbane Water Historical Society 1963)

**This means that potentially some 18.72 million tons of ash have been dumped into the ocean off the Central Coast.** This legacy is one of the many issues unknown to the community or the government or is this known to the government and all those making decisions today?

To increase Eraring's dam capacity by 5 million cubic meters will not accommodate the lifespan of the power station and ash production and it is obvious that the legacy will be left up to the NSW taxpayers to remedy.

In 2016, Australian coal fired power stations produced 12.35 million tonnes of coal ash, representing almost 20% of all the waste products in Australia. There is no obligation for power station operators to provide financial assurances to secure or guarantee funding during or post closure for remediation or for keeping the sites stable and preventing continuous pollution of our lakes. It is now time for N.S.W. to catch up with the rest of the world, before class actions begin and the costs to government become bigger than anticipated.

The issue of an ever increasing coal ash storage problem has cumulative impacts on the entire region. Who is going to sweep the problem under the carpet? Overflows during high flow periods, seepage, sediment contamination, water quality, marine impacts leading to human health or licenses to pollute are some of the issues that just won't go away, even if the dams are capped with so called clean fill from the North Connex projects in Sydney.

The community has asked the Environmental Protection Authority for answers to the reported Vales Point contractor Howards Recycling having mixed Asbestos with the clean fill and months later we have no answers to how long the operation had been conducted, how much asbestos was dumped or where it was mixed, in Sydney or on site, or what the plans for remediation are. All these questions the community has asked are still unanswered.

The community cannot wait any longer for the authorities to acknowledge the enormity of the problem and requires them to take immediate action to remedy the massive concerns, before it is too late, too costly or is this simply a political game that is being played here? The region has had its fair share of exploitation for the benefit of NSW. It is now time to turn the game around and make the region a safe, healthy, liveable and sustainable place to live and raise a family.

### ***Economic and employment opportunities associated with coal ash re-use, site remediation and repurposing of land:***

With the lack of transparency in and around the industry, it has been near impossible for the community to understand the complexity of the re-use of coal ash. The belief is that only one operator has the licence to use anything from 17% - 35% of the stored ash to be mixed with concrete from Eraring and or Vales Point. Japan re-uses up to 97% and it is therefore the belief that studies into other safe processes need to be urgently conducted, yet this will not solve the immediate problems.

Obviously the opportunity of increased employment comes with any further use of coal ash. The remediation of the land also introduces further long term job opportunities and with the potential of the re-use of lands equivalent to well over 1000 Olympic swimming pools at Eraring and Vales Point alone, there is potential for some amazing projects such as continuation of bush corridors identified in the Lake Munmorah Greater Regional Plan, as our population continues to grow with the need for further National Parks.

The power stations have a limited lifespan as we know them and therefore once decommissioned will not continue to produce coal ash or other contaminants. Yet this alone does not hold the answers that the existing and future communities demand. The Central Coast and Lake Macquarie regions do not want another Erin Brockovich type movie made about the legacies of the power industry in NSW and overcoming the lack of urgency felt by the government to remediate any potential environmental or human health issue, should be the utmost priority by this inquiry.

The repurposing of any lands after complete remediation should be returned to the communities who have suffered for so long. Vales Point has been approved for a tokenistic solar farm with the operators having failed to indicate the method of stabilisation of footings and the project having no direct positive effect for the community.

All remediated lands should be returned to their original state, if not an improved state and to become National Parks and biodiversity corridors linking other bushland and wetland areas. History shows that these sites have once been floodplains or wetlands draining into creeks leading into estuarine areas of the lakes. Many were once breeding areas for water birds and other aquatic life.

All surface and groundwater, post remediation, needs to be continually independently monitored for heavy metals for several years after being declared remediated. Heavy metals and other toxins may take years to leach from deep areas of the dams or from ground waters.

It would be prudent of this inquiry to have government intervene on the current exclusive contracts and or royalties to ensure that other operators also have the opportunity to use coal ash or have those royalties directed to improving the environmental situation in each region.

Levies on coal ash need to be introduced for the depositing of ash in landfills and ash dams at a cost to the power plant operators and also used for local cleanups, as per ratepayers are expected when depositing household rubbish at their local tip. Industry should not be given a privileged position when it comes to contaminating land and water bodies.

These initiatives may not come close to the cost of remediation of these N.S.W. sites, yet would go some way to improving the integrity of the operators, industry and government for poor practices over many decades.

**As part of any remediation the relocation of existing and future produced coal ash must be placed into lined facilities until all stockpiles are either used or destroyed, not capped.**

When the full truth and extent of the environmental nightmare is slowly being made aware to the general community, house prices will for some time be reduced. Each home purchaser in most cases moved to the region with the understanding that it was liveable. As time goes on and reports of Asbestos, PFAS, heavy metal contamination, low birth rates and **respiratory** or cardiac concerns become apparent, with no long term plans or policies in place, one can only assume that those land prices will also diminish. Therefore impacting on the largest asset each family has, there home.

***Adequacy and effectiveness of the current regulatory regime for ensuring best practice remediation of coal ash repositories:***

It is quite obvious that there is **NO** World's best practice policy for remediation of ash dams in N.S.W. The best the community has is self regulation by the operators, overseen by the Environmental Protection Authority that has a very poor record for protecting the Environment or being an Authority.

Fast forward to the future and as a result of poor coal ash management decisions, carcinogenic run-off now leaches from unlined coal ash dams into Lake Macquarie and its waterways and potentially the Tuggerah Lakes system. A legacy for future generations bequeathed by illogical planning that now stands condemned by the community and the science supporting them.



The E.P.A. has continually let down community after community by either being apologists for polluters or handing out tokenistic fines that continually average \$15,000 for each breach of license. For example that at Mangrove Mountain near Gosford and previous breaches of licenses by Delta Electricity at Vales Point to name two that the community is still waiting for answers.

It has been published that fines for less serious breaches have been on average only 84 per year for the past ten years, suggesting that only 8.4 breaches per year occurred in the whole of N.S.W. Since August 2017 the E.P.A. had overseen no prosecutions for causing serious harm to the environment (Tier 1 offence). They allowed illegal dumping to flourish, had taken no action of waste dumping from N.S.W. to Queensland, ignored the collapse of recycling rates to occur with no planning, support or strategies, tolerated poor behaviour and corruption and attempted to cover up and allowed a culture of misleading information and spin to be foisted on the public and kept information secretive with no real transparency.

The N.S.W. P.O.E.O Act is implicit on any person or corporation polluting land or water with penalties ranging from individuals being fined \$1 Million and Corporations up to \$5 Million. The licenses to pollute are a thing of the past, as there should be NO excuse for doing so, especially from the authority put in place to protect both the Community and the Environment, as announced on the E.P.A. website.

The communities close to power stations lost confidence in the power industry & the government authorities put in place to protect the environment and human health a long time ago. Yet those in the community who deal directly with the E.P.A. know that they too are a toothless tiger when it comes to any form of World's Best Practice for protecting the Environment or Human Health.

N.S.W. through the E.P.A. has a plethora of legislations and policies to ensure our Environment and Human Health is protected. Some of these are named below...

1. Contaminated Land Management Act 1997
2. Dangerous Goods (Road & Rail Transport) Act 2008
3. Environmentally Hazardous Chemicals Act 1985
4. Forestry Act 2012
5. National Environment Protection Council (N.S.W) Act 1995
6. Ozone Protection Act 1989

7. Protection of the Environment Administration Act 1991
8. Protection of the Environment Operations Act 1997
9. Radiation Control Act 1990
10. **Waste Avoidance & Resource Recovery Act 2001 (Current 1<sup>st</sup> August 2018 to date, accessed 12<sup>th</sup> October 2019 at 14:55).**

**This act the W.A.R.R.A. has eight (8) objectives...**

**(1.) to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development,**

**(2.) to ensure that resource management options are considered against a hierarchy of the following order...**

**(1) avoidance of unnecessary resource consumption,**

**(2) resource recovery (including reuse, reprocessing, recycling and energy recovery),**

**(3) disposal,**

**(3.) to provide for the continual reduction in waste generation,**

**(4.) to minimise the consumption of natural resources & the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste,**

**(5) to ensure the industry shares with the community the responsibility reducing and dealing with waste,**

**(6) to ensure the efficient funding of waste and resource management planning, programs and service delivery,**

**(7) to achieve integrated waste and resource management planning, programs and service delivery on a State-wide basis,**

**(8) to assist in the achievement of the objectives of the *Protection of the Environment Operations Act 1997*.**

**Under this Act the Environment Protection Authority has the following functions:**

**1.(a) to develop, implement or co-ordinate the implementation of (and evaluate strategies and programs for State-wide achievement of) government policy objectives in respect of:**

**(b) recourse efficiency and waste reduction and management in relation to regions, industry sectors or material types, and**

**(c) community education and awareness in relation to recourse efficiency and waste reduction and management, and**

**(d) programs for the prevention of litter and illegal dumping, and**

**(e) market development for recovered recourses & recycled materials, and**

**(f) information dissemination,**

**(g) to develop, co-ordinate and monitor the implementation of event and public space waste management codes,**

**(h) to assist local communities to enter into arrangements for regionally-based secondary resource recovery from waste,**

**(i) to assist in developing co-ordinated waste management services, including systems and contract reform (such as contracts for waste and recycling services and system co-ordinations),**

**(j) to research and develop waste reduction and recourse efficiency infrastructure, technologies and systems,**

**(k) to develop and support training and education programs for recourse efficiency, waste reduction and waste and litter management.**

**(l) to monitor, report on and evaluate the regional implementation of State-wide policies & strategies with respect to waste,**

**(m) to advise the Minister as to the kind of articles, materials and substances that should be prohibited from being used for landfill or from being used in connection with other treatment processes, and the resource recovery options of those articles, materials and substances,**

**(n) such other functions as may be conferred or imposed on the EPA by or under this Act,**

**2. The EPA may provide advice to the Minister on matters relating to waste policy,**

**3. The EPA is, in the exercise of the EPA's function under this Act, to have regard to the principles of *ecologically sustainable development*.**

Yet very few of these Acts are acted upon when it comes to the ongoing impacts of many coal ash dams throughout N.S.W. It is our opinion that the EPA has failed in their duty on several functions within this Act.

In 2016 Sunset Power Pty Ltd (Trading as Delta Electricity) issued a media statement stating "There is no evidence of leaching from Vales Point Ash Dam into the groundwater table". However, Sunset's own self monitoring data reveals significantly elevated heavy metal contamination at the groundwater LMPs.

Evidence of further contamination is currently under legal scrutiny in the law courts, as land owner action immediately opposite the Vales Point dam to the south, is showing worrying concerns that the leaching may be spreading and then contaminating fresh water supplies & potentially reaching Lake Munmorah & the Tuggerah Lakes system further to the south.

It has been suggested by the "Out of the Ashes" report by the Hunter Community Environment Centre on water pollution and Lake Macquarie's aging coal-fired power stations, that "A.N.Z.E.C.C. (2000) should apply to the quality both of surface water and of groundwater, since the environmental values which they protect relate to above ground uses. Hence groundwater should be managed in such a way that when it comes to the surface, whether from natural seepage or from bores, it will not cause the established water quality objectives for these waters to be exceeded, nor compromise their designated environmental values or be subject to the full force of the law.

As the population increases dramatically surrounding these coal ash dams, issues will continue to be raised and unless stringent guidelines and legislations are set in stone and enforced, the region has no future.

Most of the re-use or remediation processes currently being used by power station coal ash dams in N.S.W. are very much tokenistic. The political influences previously alerted to, are very much part of the problem and not the answer that the community wants to see.

The community expects that regulators and government authorities to understand and effectively follow these Acts and regulations. They were put in place by previous governments for good reason and not to have them effectively swept under the carpet, thus totally ignoring the science for the financial gain of a few.

Yet, even perceivably being able to reuse the coal ash to equivalent to world standards is also flawed with further danger for the communities surrounding the sites. Repeated requests that the coal ash haulage currently being used should be directed to the M1 has met with no success from both State and Local Governments.

The same requests from our members for meetings with Origin Energy, Boral and Cement Australia to have a traffic management plan implemented for Lake Macquarie, Newcastle and the Central Coast have not come to fruition. Lake Macquarie Council continually evades dealing with the severe impact of heavy vehicles operating twenty-four hours, seven days a week, by referring complaints to the Environment Protection Authority. Whereas minor road works would allow the reopening of a ramp existing at the Toronto West Coal Haul Road, redirecting 95% of heavy vehicles from residential streets in Lake Macquarie, Newcastle and the Central Coast to the M1. These issues have been raised for over seven years with Local & State political representative without any outcome.

**The Coal ash Community Alliance Inc. support all recommendations set out by the Hunter Community Environment Centre's comprehensive "Out of the Ashes" report, February 2019.**

***Mitigation of actual or perceived conflict of interest arising from the state having ongoing liability for remediation costs the quantum of which will be impacted by government policy and regulatory action:***

As stated earlier, the community has lost confidence in the Government and its authority through the Environment Protection Authority (E.P.A.) and the perceived lack of full enforcement of breaches of licence and or the inadequacy of punishment through the many acts available.

**The 2017 E.P.A. Environment Compliance Report (coal ash dams & emplacements) found that 80% of the audits carried out complied, yet therefore **20% did not**, all being deemed as **moderate environmental significance**.**

The findings of the E.P.A. report demonstrated that the compliance & environmental performance of coal ash dams & emplacements could be improved by...

- **Ensuring dam water levels are effectively managed to prevent the pollution of waters.**

This has not occurred in two ways. First being **SELF REGULATION** and secondly the failure of the E.P.A. to enforce the many N.S.W. Acts for protecting such waters. Overflows during high rain periods are an accepted failure of managing or preventing pollution into our waterways.

- **Developing and implementing consistent operational documentation and procedures.**

This finding can only be that in 2017 and perceivably until 2019, inadequate operational documentation and procedures had not been drafted, installed or followed for the previous five decades of ash dam operations with this needing immediate attention. Only in the past half decade the N.S.W. Government has either sold off or relinquished control of the power stations and therefore it could be said that the N.S.W. Government had totally mismanaged most procedures.

- **Insuring regular maintenance of critical plant and equipment is carried out.**

Again implying that regular maintenance of **CRITICAL PLANT & EQUIPMENT** had not been conducted on a regular timetable. The self regulation was somewhat inadequate or verging on criminal negligence, the E.P.A. was not doing there job or simply all of the above.

There is an actual and perceived issue of a conflict of interest where most power stations were under licence to the E.P.A. Yet the decommissioned Munmorah Power Station now controlled by Generation Property Management Pty Ltd (GPM) is not licensed as a scheduled activity but is licensed for a **'Miscellaneous licensed discharge to waters (at anytime)' of >1000 megalitres (ML) discharged.**

The GPM group controls the decommissioning of the power station plus the surrounding 700 hectares of surrounding land & infrastructure and all regulatory & constructional obligations with past and future management of the site when transferred to the company in October 2016. They comply with all aspects of the Electrical Generator Assets (Authorised Transactions) Act 2012, **yet are also under any directions of the N.S.W. Treasurer in accordance with the Act.**

No community consultation was conducted for the signing over from the Government to GPM of the massive land title and or the future use of the 700 ha site, yet the Government still has directional powers through the N.S.W. Treasurer.

Reports by the E.P.A. of PFAS and diesel fuel discharges into Lake Munmorah and Colongra Bay from the power station site were raised in 2017 and have taken nearly three years to have testing conducted on fish species (no prawns were able to be caught). No further communications have been conducted by either GPM or the E.P.A. for the future use of these lands.

Not discarding the historical findings of the 8000 tons of ash dumped in the ocean at Wybung Head each week over the perceived past 45 years, there is no written evidence into the size of the coal ash dam at Munmorah or what impact it may be having on the environment and human health in the region. A recent report and findings supplied from Stephen Saladine, Managing Director of GPM on soil samples are currently under scrutiny by independent sources. Yet the finding did state elevated manganese, zinc, boron and that the water is saline & is moderately acidic. We are unsure if the N.S.W. Treasurer has been notified or is this another conflict of interest?

**Transparency and honesty** from the Government, their departments and authorities and the operators is what the community is asking for. It is obvious that operations have not been conducted as per legislation and or policies and the community has been living with those legacies for many decades.

### **Risk and liabilities associated with inadequate remediation including community and environmental health impacts:**

The risks and or liabilities are immense to both the health of the regional communities and potential ongoing impacts on the environment, if the full remediation is not conducted or complete.

Health issues have been continually raised in the region for decades and totally ignored. Asthma and bronchial disorders, cardiovascular disease, cancers, mortality rates impacts on drinking water or measuring air quality can all be dismissed as a lower socio-economic problem, consequences of an aging population or smoking too much, as reported by the Central Coast Regional Health Manager Dr. Peter Lewis in 2017.

Yet, the Respiratory & cardiovascular diseases and cancer among residents in the Hunter New England Area Health Service report in 2010 or earlier reports by Dr Vaughn from Lake Munmorah some three decades ago suggest differently.

A recent four year Cancer Cluster report by Torrens University on the Central Coast (2017) for the Cancer Institute identified nine cancers in the study being officially 6% above the N.S.W. average; our figures suggest a greater percentage. Clusters of the nine types of cancer have been identified in suburbs such as Wyong, Wyong north/north east, Gorokan and Charmhaven being directly in line with both Vales Point and Eraring power stations.

Doctors for the Environment have also reported the effects of power stations are amongst the world's worst for toxic air pollution. Serious SO<sub>2</sub> (sulphur dioxide) & nitrogen dioxide air born problems, culminating in possible childhood asthma, lung disease, cancer, birth defects and reproductive issues.

Environmental Justice Australia have identified many air pollution issues from burning coal and depositing coal ash in unlined, fifty year old dams through their recent report "Toxic & Terminal". They have also identified the inadequacy of E.P.A. air monitoring stations, instead opting for the operators to self monitor and regulate.

The number of official E.P.A. air monitoring stations, especially in relation to the lower Hunter and Central Coast is an insult to those communities. The upper Hunter has fourteen (14), Sydney has twenty five (25), Illawarra has eight (8), Lower Hunter has six (6) & Central Coast having just one (1).

With the establishment of power generation in Lake Macquarie region a limit to seafood that can safely be eaten has been recommended by the World and local health authorities. Apart from the impacts on the Lake, even more alarming circumstances are being created by ignoring problems associated with dam walling, as Eraring power station proposes to pump ash as a slurry over or in underground mine workings. Independent consulting engineer's report has inferred the existing dam wall in a seismic event could fail resulting in catastrophic environmental and human devastation for the region.

The Hunter Community Environment Centre has also identified water pollution issues from heavy metal contamination into Lake Macquarie through their 2019 report "Out of the Ashes". This report identified water sampling and monitoring results showing concentrations of copper above the 95% protection level. Aluminium, iron and manganese above ANZECC aquaculture protection guidelines, which indicates they are likely to be harmful to edible fish, molluscs and crustaceans. Other sites nearby had concentrations of arsenic, nickel and zinc.

The report raised issues with barriers and failures in coal ash management and re-use, sources of Lake Macquarie heavy metal pollution and alarming statistics on both Vales Point and Eraring power stations and their legacies.

**Inadequate remediation is not just coal ash within the dams, its surrounding soils. It is air, surface and groundwater, sediments in creeks with pollution leading to our rivers and lakes, due to inadequate safety regulations, neglecting to protect the environment and possibly causing human health issues for generations to come.**



Social justice and intergenerational equity are the driving core reasons why the community is demanding honesty and transparency. It is not good enough for corrupt contactors such as Howard Recyclers being able to illegally dump & mix quantities of Asbestos into the clean fill from Sydney's North Connex project having been deposited in the Vales Point coal ash dam.

In December 2018 the Northern Lakes Disability Tourism Precinct Committee Inc. wrote to Karen Marler, Director & Leanne Graham, Projects Officer for Newcastle's Environment and Protection Authority requesting information on the confirmation, investigation, quantity deposited, how long the process had occurred and where the Asbestos was mixed, in Sydney and transported to the Central Coast or on site. No correspondence has been received some twelve months later.

The legal liabilities of this procedure would lie firmly on the responsibility of the N.S.W. Government and the E.P.A. for failure to protect our communities and the environment, as clearly shown on their website. It is not up to the community to identify the human health or environment issues from this activity, it is the government's legal responsibility to prove that no such contamination has left the site and what exactly they are going to do about the remediation.

The community through several organisations have repeatedly called for an immediate **Independent Human Health and Environment Audit on the region**, to find out the extent the coal ash dams have impacted our lives and what is needed to combat the issues over the coming years or decades.

Supporting evidence for the Audit is that coal ash is road hauled by Boral, Cement Australia, Southern Cross, independents, in sealed tankers. Additional to this corporate acceptable containment are heavy vehicles used primarily in the coal and bulk materials trade, vehicles with clearly noticeable coverings and dust screens in disrepair, even missing, even though disputed by Origin.

Without exception these heavy vehicles use and have used for several years, the Lake Macquarie, Newcastle and Central Coast road system, and do so without a traffic management scheme. None have highly visible toxic warnings displayed or are washed down on site because if such was the case the 'beneficial use of ash' would alert the community that these vehicles in suburban streets are a threat to health, and the benefits are no more than a legislative stratagem to increase dam storage capacity.

It is imperative for the N.S.W. Government and all power station operators generating coal ash and simply dumping it into fifty year old, unlined earth walled dams to come up with a sustainable and environmentally friendly answer to decades of neglect and abuse on the regional communities. The burning of coal must cease, as leachates and talcum-like dust attributed to all N.S.W. power stations (Vales Point & Eraring) rain down on communities who don't understand why their loved ones are increasingly becoming sick.

As spokesperson for the Central Coast chapter of the Coal ash Community Alliance Inc. (CCA), I respectfully request the right to address the Legislative Council's Public Works Committee on this and other related matters when the hearing is convened.

Yours sincerely,

*Gary Blaschke*

Gary Blaschke OAM

CCA Spokesperson

Lake Munmorah resident

**References:**

**E.P.A. Environment compliance report (2017)**

**Hunter Community Environment Centre "Out of the Ashes" (2019)**

**Environmental Justice Australia "Toxic and Terminal" (2019)**

**Hunter New England Area Health Service Report (2010)**

**Doctors for the Environment Australia (2019)**

**Torrens University Cancer Cluster report Central Coast (2017)**

**N.S.W. Environment Protection Authority**

**Northern Lakes Disability Tourism Precinct Committee Inc.**

**Blue Gum Flat to Budgewoi, Charles Swancott, Fellow Brisbane Water Historical Society.**