INQUIRY INTO INQUIRY INTO PFAS CONTAMINATION IN WATERWAYS AND DRINKING WATER SUPPLIES THROUGHOUT NEW SOUTH WALES

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SUBMSSION TO THE NSW INQUIRY RE PFAS

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The Continuing Problem of PFAS Contamination

The fact that PFAS chemicals are highly dangerous to health in a variety of ways, and when inhaled or otherwise ingested result in a number of illnesses, some fatal, has long been understood, as this quote makes clear.

"As early as 1970, researchers for DuPont found that some PFAS were "highly toxic when inhaled and moderately toxic when ingested".

Following normal practice, the company said nothing and continued to produce the chemicals.

In the late 1970s, 3M scientists found that a relatively low daily dose of PFAS—less than most people consume today—administered to monkeys could kill them within weeks. This would put the chemicals in the highest of five toxicity categories recognised by the United Nations. Again, the company involved said nothing while ramping up production.

In fact, 90 percent of PFAS have been produced in the time since 3M and DuPont knew how dangerous the chemicals are.

https://redflag.org.au/article/how-a-giant-corporate-cover-up-poisoned-the-planet-and-everyone-on-it

In the past few years, PFAS chemicals became associated with the foam used in fire-fighting equipment at military bases in Australia, and other venues where fire is a significant risk. This includes coal-fired power stations where for years training procedures resulted in the foam being sprayed at targets in the lakes or in canals leading to the lakes on the Central Coast, according to a witness who had personal experience of the fire fighting training. (See the testimony of Engineer Thomas Bunn to the Future Sooner Citizen's Inquiry into the Health Impacts of Coal-fired Power Stations, Final Report, 2025)

In 2024, the NSW Environment Protection Authority announced that it had found "historical" PFAS (and petroleum hydrocarbon) contamination at the site of the former Lake Munmorah coal-fired power station. PFAS chemicals had been used over many years in fire-fighting training, and perhaps some fires.

According to a EPA media release: "The site has been fenced off and inaccessible to the public since 2016, limiting potential contamination exposure...We know the community will be relieved the clean-up process can finally get underway" and much more in triumphalist bureaucrat speak. Even claiming that "Removing contaminants like PFAS and petroleum hydrocarbon from the land will better protect the environment and people's health for current and future generations. This allows the site to eventually be redeveloped for another use, opening up opportunities for new jobs and investment in the local economy."

The EPA indirectly admitted that there might be contamination other than that of the land, and reassured the community that "It is important to note, testing found seafood from the Tuggerah Lakes system remains safe to eat as part of a balanced diet (no more than 2-3 serves of seafood a week)."

See this link for the full media release in the EPA's calm, optimistic but rather uninformative, even misleading, statement.

https://www.epa.nsw.gov.au/news/media-releases/2024/epamedia240503-next-steps-for-contaminated-land-at-lake-

munmorah#:~:text=Land%20at%20the%20former%20Lake%20Munmorah%20Power%20Station,Environment%20Protection%20Authority%20%28EPA%29%20and%20will%20be%20cleaned-up

Why the EPA did not comment on the use of fire-fighting equipment with PFAS laden foam at the nearby Erarang and Vales Point coal-fired power stations is known only to them.

Response to the EPA Statement

A member of Future Sooner and leading Central Coast environmental defender, Mr. Gary Blaschke OAM, has long been aware of the problem of PFAS-and other contaminants emanating from the Central Coast coal-fired power stations. He made known to the EPA his views about the dangers of PFAS to the community back in 2017. Here are extracts from his response to the EPA media release in May 2024, showing his exasperation at the long delayed and less than forthright EPA response:

" ERIN BROCKOVICH, WHERE ARE YOU?

"It was in late September 2017 when Holly Love, Unit Stakeholder Engagement Team of the EPA in Sydney contacted me to discuss that they the EPA, had found PFAS (per-and polyfluoroalkyl) substances in Lake Munmorah and Colongra Bay on the Central Coast.

Holly Love proclaimed that the EPA intended to conduct a series of fish tests to see the extent of the contamination problem, especially in the lakes (lagoons), as they are regularly used for fishing and recreation purposes.

The EPA put out two Media Releases both on the same day in September 2017, one indicating that the investigations were underway, the other regarding Munmorah and Colongra Bay information for residents, both very limited in their distribution.

Both reports either stated that sampling would include areas around the power stations and in the wider Tuggerah Lakes System, plus the undertaking of a survey of nearby residents to gain a greater understanding of the impacts and that of the key exposure pathways, as PFAS can contaminate seafood, and or drinking water.

The second report went on to say "to date, sampling has been limited and the NSW Government considers that further testing is required to determine if PFAS has migrated offsite, and if there are any potential health impacts to the surrounding areas and local community".

The same report indicated that studies conducted were looking at impacts on cholesterol levels, male hormones, heart disease, liver changes and other effects, including cancer. To date, the community have not seen nor been privy to the findings...

Taking some period of time to catch a fish or a prawn to be tested, I continued to pressure the EPA for the results and, after threatening to involve the Minister, surprisingly they had caught five species of fish and some prawns, carried out their studies and put out a fact sheet in December 2018.

The fact sheet went on to disclose that the testing of seafood in the Tuggerah Lakes System was undertaken to determine if exposure to PFAS from consumption of seafood is a risk to the community. It had found that the contaminated groundwater was generally moving towards the centre of Munmorah and Colongra sites, meaning that exposure to PFAS from the groundwater is limited.

I find it alarming that the EPA then went on to say that there is no current evidence to suggest an increase in overall health risks related to PFAS exposure, however their Expert Panel also said health effects cannot be ruled out at this time...

We can only hope that the EPA Expert Panel has told the fish and crabs not to visit the lakes until remediation is completed and have informed the professional fishermen that they potentially could be part of the problem...

The issue of PFAS contamination was raised with now Central Coast Minister David Harris MP on 10-10-2017. I subsequently received an EPA Media Release from Mr. Harris in July 2019 stating that the Tuggerah Lakes had been given the all clear after PFAS testing, which was obviously flawed with what we now know in 2024.

In the same Media Release the EPA Manager of Strategic Regulation, David Gathercole said "a rigorous PFAS testing regime had been completed and the results were good news for the community".

Years of neglect and cover-ups by consecutive Governments now find in May 2024 that the EPA has declared the Munmorah site as a significantly contaminated site. PFAS, the forever chemicals, are flowing down the channels into the Tuggerah Lakes System, having Lake Munmorah taking 520 days to circulate, 460 days for Budgewoi Lake and 220 days for Tuggerah Lake. The cumulative impacts must be devastating for both the environment and human health alike.

Adding to the problem, we now have a recent development application being submitted to Central Coast Council for a water treatment plant, being simply a PFAS treatment plant which will operate for the next ten years, if approved.

To make things worse, proposals for a complete new suburb at Doyalson with over fifty's housing, a housing estate, childcare and medical centre, fast food outlets and a service station has been identified, which will be sandwiched between the Munmorah PFAS and coal ash dump and the Vales Point coal ash dam which has potentially caused many chronic health and environmental issues for the region."

The Media Jumps In

This story in the Grapevine newspaper took up Gary's criticism of the EPA:

"Since 2018 if not before, the general community have been told by the EPA that there was no per and poly-fluoroalkyl (PFAS) substances in Lake Munmorah or Colongra Bay which could cause human health issues. We were told by the Federal Minister for Health in 2018 that there is no evidence to suggest an increase in overall health risks related to PFAS exposure.

In fact today in 2024 we are told by Central Coast Council that the water quality in our lakes is excellent, that is only if you swim close to shore, as the EPA reports indicate that PFAS is generally moving towards the centre of the Munmorah and Colongra sites, says community advocate Gary Blaschke.

Like Williamtown to our north, Wreck Bay to our south and sites around the United States of America, legal actions have been and are currently being pursued. For close to fifty years on the coast, all power stations used PFAS products as fire-fighting foams. The contamination of groundwater, stormwater and freshwater pond running down the canals and into our lakes, is now coming back to haunt us.

In 2023 the Government engaged General Property Management (GPM) to decommission and remediate the former Lake Munmorah power station. GPM recently applied to Central Coast Council for a development application to build a water treatment plant on site. Due to further investigation the water treatment plant was in fact a PFAS treatment plant which would operate for a further ten years (DP1201414 301 Scenic Drive Colongra 2262) said Blaschke.

Their previous Statement of Environmental Effects (SEE) states that "to date, sampling has been limited. The NSW Government considers that further testing is required to determine if PFAS has migrated offsite, and if there are any potential health impacts to the surrounding areas and local community".

Effectively we now know that PFAS has migrated into the Tuggerah Lakes system. Certainly not recorded by Council in water samplings, yet knowing that the amount of PFAS on the land of the former power station site would take ten years to treat and remediate.

Council records show that Lake Munmorah takes 520 days to fully circulate its waters. Budgewoi Lake some 460 days and Tuggerah Lakes 220 days. The lakes are not technically lakes, they are simply shallow coastal lagoons which are stirred up by storms and wind gusts, which effectively stir-up the sediments and accumulated PFAS in the middle of our lakes, said Blaschke

Court actions in Australia

The Commonwealth government was hauled into Court by a class action by about 30,000 claimants in a class action as detailed in the link below. Here is the punchline:

"The federal government has settled a class action over PFAS contamination from firefighting foam at seven sites across the country, but residents are calling the amount "atrocious".

The result: a settlement for 132 million dollars."

https://www.abc.net.au/news/2023-05-15/pfas-class-action-commonsettlement-reached-with-30-000-claimants/102346274

See also:

https://www.abc.net.au/news/2020-02-27/pfas-federal-class-action-setttlement/12006184

And see

https://www.abc.net.au/news/2019-10-21/erin-brockovich-sounds-alarm-over-pfas-as-new-gld-sites-emerge/11606772

Finding

It is clear that NSW governments have failed in their duty to keep their citizens safe and healthy through their negligence (or worse) in dealing with the coal-fired power stations' toxic emissions and procedures including PFAS laden firefighting foam.

Recommendation

There should be an Independent Inquiry established to investigate the failure of the EPA to take adequate measures to fulfil its responsibility (1) to protect the environment, and therefore the health of the people of New South Wales living on the Central Coast and around its Lakes; (2) to keep the community affected fully and honestly informed of the dangers to it and EPA actions to protect them.