

Thursday 6 March 2025

PFAS Contamination in Waterways and Drinking Water Supplies  
Throughout New South Wales



CCSN – Questions on Notice

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The CHAIR: Before I go to Government members, I wanted to ask—I was going to ask this question later—about the testing and the personal resources that you've put into it. How much has the community spent on these tests?

GEM GREEN: I'll have to take that on notice, Chair, to be clear. But it would be in exceedence of \$30,000, is my recollection. Frances, would you add to that?

**Response:**

The CCSN confirms testing for PFAS in the past 9 months is just over \$30,000. In addition to financial costs is the volunteer hours to conduct this testing by Members of the CCSN. To date volunteer time in relation to groundwater contamination would be well in excess of 1,000 hours.

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GEM GREEN: Mr Donnelly, if I could add to what Frances has just shared, we'd appreciate taking on notice the seeking of information—I think it's from SAFEMEAT Australia—in relation to any form of drafts that they may have currently available for producers to share with the Committee.

**Response:**

The Export cattle industry regulation is made by the Commonwealth, with recommendations from Safemeat. Following up on this question, the CCSN has been informed that there is no intention of putting a requirement re PFAS on the 'Vendor Declaration' and that the recommendation will be advice only from Safemeat.

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The CHAIR: Do you know if Cadia has used PFAS chemicals in the past or is still using them? Do you have any understanding of that?

FRANCES RETALLACK: Yes, they've admitted that they used it as firefighting foam until 2015. They were having a fire underground every six weeks.

The CHAIR: Sorry, what were they doing every six weeks?

FRANCES RETALLACK: Putting out a fire underground, unbelievably. They told us recently that after all the recent publicity they had done an audit onsite and discovered two drums which they had struggled to have properly disposed of. We have been told they have been dumped in the pit. If they had properly disposed of them in the past, they wouldn't have struggled to dispose of two drums today. That is my belief.

GEM GREEN: I'm happy to provide further details on that question on notice. We would appreciate sending through extra information.

The CHAIR: You are saying that you think they used them up until 2015. Is it your understanding that this is the same kind of firefighting foam that was phased out in 2007 by Fire and Rescue NSW or are we talking something different?

FRANCES RETALLACK: My understanding is it's PFOS foam—PFOS firefighting foam.

GEM GREEN: I'm not sure that we definitively know the answer to that with regards to chemical composition—is where I'm coming from.

### **Response:**

The CCSN obtained a GIPA through DRNSW in March 2024 under the GIPA Act 24-88 in relation to underground fires and Respirable Crystalline Silica (RCS) at Cadia Valley Operations. An additional review of these documents for this response states between the 14 July 2019 and the 4 March 2024 there were a total of 48 fires on site in 43 months – that is 1.11 fires/month on site, not every 6 weeks as stated in the transcript, our initial count was incorrect. Incident Number - IncNot0044460 13 April 2023 – it is noted that the loader operator activated the (*Aqueous Film Forming Foam*) \* AFFF which extinguished the fire (\*Italics inserted by CCSN to explain the acronym AFFF).

An article published on **14 August 2024** by the ABC;

*“Contaminated foam has been appearing in a river in Central West New South Wales.*

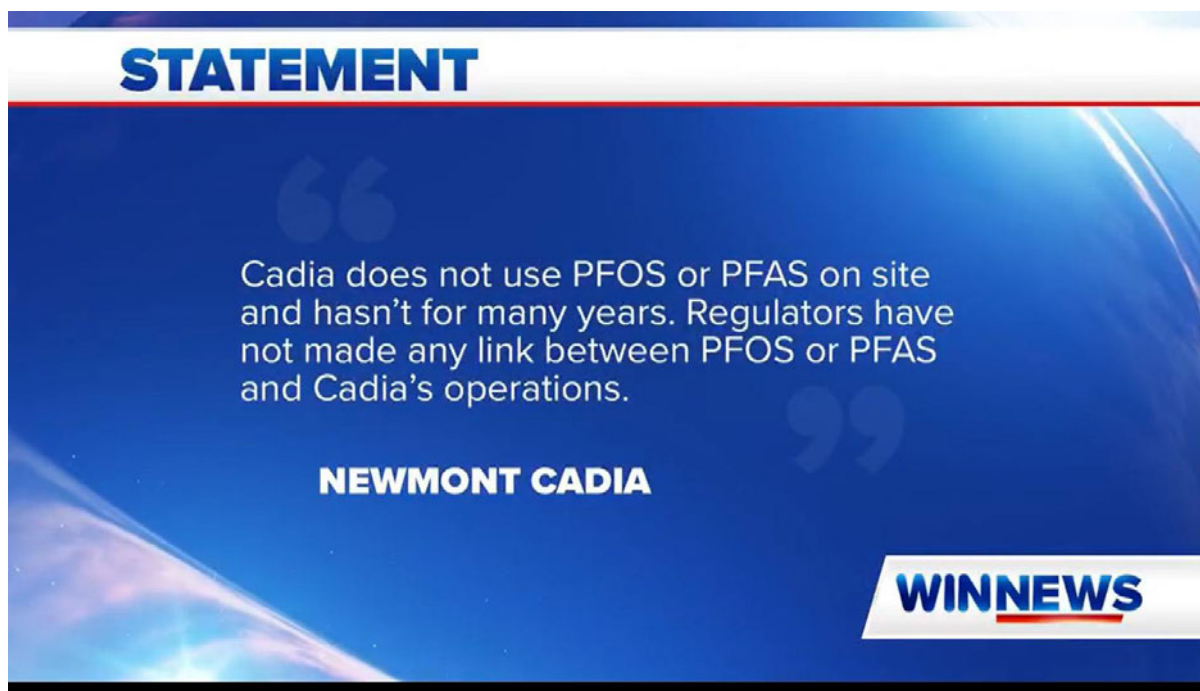
*Concerned livestock producers have discovered the foam contains the harmful chemical PFOS, from the group of substances known as PFAS.”*

Further into the article.....

*“A spokesperson for the mine said it last used PFOS and PFOA in 2015 and was currently in compliance with all waterway monitoring. Cadia is not required by the EPA to monitor for PFAS chemicals.”*

<https://www.abc.net.au/news/2024-08-14/farmers-pull-pfos-chemical-from-belubula-river-nsw-pfas/104193746>

On the **15 August 2024** on WIN NEWS Newmont Cadia responded with the following:



Below we provide an EMAIL – sent to community members by CVO **26 August 2024**

## EPA releases findings from environmental reports



**Newmont  
Cadia**  
to me

Mon, Aug 26, 2024, 9:03 AM

Dear Community Member,

I wanted to write to you in response to the recent publishing of the Environment Protection Authority (EPA) reports as they relate to a number of tests conducted by it across the Cadia district and beyond.

Newmont Cadia (Cadia) acknowledges and welcomes the EPA's findings of its comprehensive monitoring and review of Cadia's operations throughout 2023 and 2024, particularly focusing on air quality and water concerns raised by the community.

Cadia understands and empathises with the concerns raised within the community and is pleased that the results of EPA testing and Cadia's own comprehensive testing programs provide clear information on these important issues.

A full statement from the EPA can be found on the EPA Cadia page: [Cadia gold mine \(nsw.gov.au\)](https://www.epa.nsw.gov.au/cadia-gold-mine), however below is an overview of the EPA's findings as they relate to Cadia and surrounding district.

### **Lead Isotope Report:**

The EPA has conducted its own Lead Isotope Study concluding that results align with Cadia's previous reports, namely that the lead signature from sludge taken from the bottom of water tanks within the Cadia district **corresponds with regional soil samples and those from materials sourced in Broken Hill (lead mine)** for the likes of water tanks, such as pipes, solder, taps and flashing, and **did not match the ore, tailings or ventilation samples from Cadia.**

#### **Air Quality Monitoring Report:**

In 2023, the EPA commissioned its own HiVol air quality monitoring stations at various points around the Cadia mine and provided Purple Air Particulate Matter 2.5 monitors to community members to use at their own properties.

The EPA's air quality specialists have reviewed data collected from these monitoring locations and concluded that **PM10 or PM2.5 recorded at these locations are well below criteria, and heavy metals such as selenium, nickel, mercury and arsenic were below detectable limits and Copper, Zinc and Lead just at detectable limits. These results were deemed acceptable by the EPA.**

#### **Belubula River Monitoring:**

The EPA undertook sampling of the Belubula River in relation to community concerns about PFAS and foam in the river. Sampling by the EPA occurred in July 2024 at locations upstream and downstream of the Cadiangullong convergence.

PFAS was detected, including PFOS, PFHxS and PFOA, but **not at concentrations expected for a foam to form based on these chemicals.** All monitoring points along the Belubula River had similar results showing that **Cadia is not the source.** PFAS is found in many water systems downstream of industrialised areas. EPA has stated in the report "The presence of PFOS in water samples does not necessarily mean there is a risk to human health or livestock."

#### **Surface Water Quality Testing:**

The EPA conducted surface water and groundwater sampling at locations across the district in May 2024 following concerns raised by community members.

The EPA's results for both surface and groundwater reveal:

- There were **no hydrocarbons, PFOS or PFAS detected in the two tributaries of the Belubula River, Flyers Creek and Cadiangullong Creek, both of which flow through the Cadia mine site.**
- There were **no exceedances of any current irrigation or livestock water guideline values.** Where the concentration of a pollutant is below or outside the range for the relevant guideline value, the pollutant is unlikely to pose a risk for irrigation or stock water use.

pH and EC upstream and downstream in the Belubula are consistent.

- Elevated levels of Nitrogen in the Belubula are understandable according to the EPA due to the long history of farming.

#### **Groundwater Monitoring Report:**

Cadia acknowledges that there was PFOS detected in one bore on site (MB2A) with a level of 0.02 µg/L which is above the respective guideline.

Given that Cadia does not use PFOS on site for any purpose, and PFOS was recorded at this bore at barely above detectable limits (detectable limit is 0.01ug/L), we are reviewing the EPA's results and will conduct further sampling. (highlighting by CCSN)

The EPA concluded that the groundwater quality near the Cadia's operations generally meets the required standards for livestock drinking water, irrigation, and ecological protection. The EPA Stated that **"The results appear to pose no significant risk to the surrounding environment"**.

#### **Environment Protection Licence Review:**

Cadia will also study the summary report of the 90 submissions to the EPA's review of Cadia's Environment Protection Licence (EPL) and work through the EPL variation process to ensure best practice is implemented. \_

The health and safety of people is Cadia's number one priority, and we are committed to conducting our mining activities in a responsible and sustainable manner, ensuring the protection of the environment and wellbeing of local communities.

As a substantial local landholder, we respectfully listen to and engage with fellow landholders and the wider community including Indigenous groups.

My team and I are always happy to talk to you in relation to our operations and I can be contacted on

Kind Regards,

Jade Little  
Acting General Manager  
Newmont Cadia

Kind regards,

**Melissa O'Brien**  
SOCIAL PERFORMANCE SUPERINTENDENT

Newmont Cadia

[NEWMONT.COM](http://NEWMONT.COM)

CCSN would like to note the following results from Envirolab testing for the EPA 20240185:

- EPA results of tests conducted on 27/5/24 (the tests referred to by CVO above) determined that 2 of the 12 (approx. 17%) bores tested had PFAS chemicals.
  - MB2A reported a total of 0.09µg/L (sum of PFOS,PFOA, PFHxS, PFHxA)
  - MB 4A reported 0.02µg/L of Perfluorobutanoic acid.

The EPA reported on PFOS only and made no comment about MB4A contamination.

At a Residents Meeting at CVO on **27 August 2024** it was stated that PFOS has been used since the mine commenced and has not been used since 2015 (Source: local landholder contemporaneous notes). To reinforce, it is noted in the GIPA that AFFF was used onsite at CVO on 13 April 2023. The type of AFFF is undefined in this report.

A confidential source informed the CCSN in Q4 2024 an audit discovered 2 drums of firefighting foam on site. The source cannot confirm if the drums were put into the pit.