

Mr Jeremy Buckingham MLC Parliament House Macquarie Street SYDNEY NSW 2000

Dear Mr Buckingham

This letter is to convey my serious concerns in relation to a video entitled "Evaporating intersected aquifer at Werris Creek" posted to your Facebook page on 30 August 2015, regarding the management of groundwater resources at Whitehaven Coal's Werris Creek Coal Mine, near Quirindi in the NSW Gunnedah Basin (the Footage). A copy of the Footage also appears on YouTube.

The central claims I wish to address with you relate to your suggestion that there has been harmful aquifer interference at Werris Creek arising from mining operations and that this is negatively impacting water quality and availability for nearby irrigators and landholders. Specifically, you assert in your video (which I note has now been viewed over 310,000 times), that Whitehaven is:

"spraying millions of litres of water up into the air to try to get rid of it and evaporate it to de-water the pit. They have intersected [sic] an aquifer and it's a really big problem...This is the future of the Shenhua and Caroona coal mines. Invariably they'll do the same thing on the Liverpool Plains – intersect [sic] the aquifer, destroy the quantity and quality of that water and they'll have to do similar things...this is why coal mining is inappropriate in these areas and is why we need to save our food bowl and the Liverpool plains from coal mining"

These claims are not factually accurate and lead the viewer / listener to infer that Whitehaven is not abiding by the very high environmental management standards which the community expects and which the company seeks to meet every day. While I respect your right as a Member of Parliament to contribute to public debate, you also have a responsibility to test information put before you before you, especially where that information has the potential to cause reputational harm. I note, in this context, that you did not contact the company prior to releasing the Footage publicly, nor did you avail yourself of information publicly available on Whitehaven Coal's website regarding water management at Werris Creek.

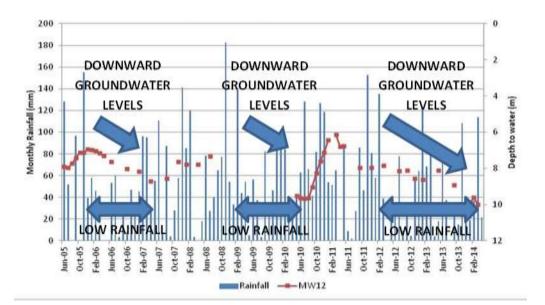
Incorrect claims about water management practices at the Werris Creek Mine are contrary to the best interests of the Werris Creek community in having accurate information about the groundwater systems upon which they depend for their livelihood. Such claims are also likely to undermine the community's confidence in Whitehaven, which is especially aggravating considering we have worked hard to establish sound environmental practices and strong community relationships. It is a very reasonable community expectation that any debate or public commentary on water management issues is based on facts, not anecdotal evidence, or conclusions drawn from inexpert observation.



I am concerned that members of the community who view your video would be left with the impression that groundwater management practices at the Werris Creek mine have "destroyed the quantity and quality" of the aquifer by "intersecting" it, and have adversely impacted the State's food bowl.

A detailed explanation for why that is not the case is set out in the attachment to this letter. In summary, however, I bring to your attention the following facts:

- 1. Contrary to the statements in your video, no aquifer has been pierced or intercepted by workings at the Werris Creek Mine.
- 2. The floor of the Werris Creek Mine is separated from the Werrie Basalt Aquifer by a clay aquitard which is approximately 100m thick.
- 3. Some seepage does occur through the aquitard into the Mine, but this seepage is:
  - a. an ordinary and anticipated part of open cut mining operations; and
  - b. authorized by the Mine's Water Access Licence in fact, data from Whitehaven's long-term groundwater monitoring program shows that the Mine consistently draws less than half of its permitted allocation from the aquifer each year.
- 4. The scientific evidence shows that water levels in the Werrie Basalt Aquifer and the nearby Quipolly Alluvium Aquifer are not dependent on the Mine's workings. Rather, as is shown by the data depicted graphically below, water levels in those aquifers is dependent on the rate of rainfall recharge. Tellingly, the water levels in the aquifers were at historically high levels after heavy rains in 2011 and 2012, even though the Mine had by then been operating for over five years.





- 5. Over 80% of water rights in the region are held for irrigation, stock and domestic use, while industry, including mining, accounts for about 1%. Any claim that mining is adversely impacting the State's food bowl needs to viewed in light of that fact.
- 6. The use of evaporators, as shown in your video, is standard practice in the mining industry, and does not imply that any aquifer has been breached or intercepted. Spraying stored water into the air over storage dams hastens evaporation and consequently reduces the amount of land needed to accommodate such dams. This leaves more land available for agriculture.

Whitehaven fully supports a diversity of land uses and acknowledges its responsibility to manage shared resources such as water carefully and in line with all relevant approval and operating conditions. Accordingly, Whitehaven is seeking to modify the terms of its relevant licence so that it can transfer water to neighboring farms for agricultural use. At present, the licence forbids the transfer of water offsite.

After you have considered the information set out in this letter, I would be grateful if you would remove your video of 30 August 2015 from your social media accounts and from YouTube on the basis that they present a distorted and inaccurate picture to viewers, including members of the Werris Creek community.

To assist you to ensure that you have all of the relevant information before making any similar future publications, I encourage you to contact us before any future statement is published so that Whitehaven can ensure that you have the relevant facts to hand.

Yours sincerely

Paul Flynn Managing Director & CEO Whitehaven Coal Limited



## ATTACHMENT – EXPLANATION AS TO WHY THE WERRIS CREEK MINE HAS NOT CAUSE A DEPLETION OF THE WERRIE BASALT AND QUIPOLLY ALLUVIUM AQUIFERS

Whitehaven's Werris Creek mine operates in proximity to the Werrie Basalt Aquifer, which is separated from the Mine's workings by a clay aquitard that maintains approximately 100 metres difference in groundwater level between the Werrie Basalt Aquifer and the floor of the mine. Some seepage does occur into the mine pit from the Werrie Basalt aquifer. This is a normal and anticipated part of open cut mining operations and is why the Mine has a Water Access Licence (WAL 32224) permitting the interception of up to 211ML per year in this manner.

Our own long-term groundwater monitoring shows that the Mine consistently intercepts less than half of this permitted allocation per annum.

Whitehaven is not aware of any scientific evidence to support claims that the depletion of nearby bores is in any way related to the Mine's workings. The Quipolly Alluvium aquifer is more than two kilometres from the Werris Creek Mine and is separated by the Werrie Basalt aquifer, which forms a natural partition between the Mine and Quipolly Creek. Real evidential data gained from long term monitoring of both the Quipolly Creek Alluvium and Werrie Basalt aquifers shows that the levels in the two aquifers are dependent upon rainfall recharge as outlined in the graph in the main body of this letter.

Changes in aquifer levels have been observed and recorded throughout the life of the mine, including during 2011 and 2012 when groundwater levels reached historic highs due to correspondingly high levels of rainfall during that period, and at which point the Mine itself had been operating for over five years.

Whitehaven's long-term monitoring suggests that the onset of drought conditions in 2012, and the fact that rainfall has not kept pace with groundwater extraction for irrigation by surrounding land users since this point, are the primary factors implicated in declining groundwater levels in the area.

We estimate that the entire groundwater system monitored to the south of Werris Creek Mine has lost approximately 15,600ML since 2012. Since 2012, Werris Creek received approximately 718ML annually in void water from rainfall runoff. During that same period, as with today, our total usage on site is approximately 350ML per year for dust suppression purposes. This modest level of annual water use is indicative of the fact that the Werris Creek Mine sells its product in raw form and does not have or need a coal washing facility on site.

To be clear, the Werris Creek Mine has water storage capacity of only 755ML at any point in time. Taking into consideration our low on-site usage (half of what rainfall provides the Mine even in drought conditions per annum), it would be impossible for the Werris Creek Mine to receive, use or store the volume of water implied in the video of 30 August 2015 which is the subject of this letter (some 5,000ML per year over the last three years).

Any suggestion that the reported depletion of nearby bores has occurred suddenly or is associated with significant volumes of water from neighbouring aquifers being diverted and stored at Werris Creek is not supported by scientific data and any other observable evidence. No aquifer has ever been 'pierced' or 'intercepted' at Werris Creek.

Another relevant fact is that during 2012 the Quipolly Dam wall was raised to increase the capacity of the dam from 5,000ML to 7,500ML. At the same time, the Dam was declared a zero discharge facility



to preserve water for town water use where previously this Dam fed Quipolly Creek. This effectively removed a significant source of water resource recharge in the region.

It is worth noting that as recently as 23 July, 2015, representatives from the NSW Office of Water and the NSW Department of Planning and Environment visited Werris Creek Mine. In concluding their visit they informed site management that they were satisfied that the water management on site was in compliance with all relevant regulations.