

I object to this proposal for many reasons, particularly the impact of subsidence on the Special areas.

However, as there is a risk that the project will proceed I will add a few comments on the proposed conditions.

### **Air Quality and Greenhouse Gas Management Plan B14**

The requirement under condition B14 to have methane captured, flared or used in a beneficial way is an important one. A feasibility study and implementation plan should be in place before, not after the commencement of second workings.

### **Water Discharges B25**

I object to the assumption that an EPL will be granted for polluted discharge into Allans Creek.



Image: South 32 discharge point into Allans Creek, Unanderra.

It is inappropriate that only volume and quality are only monitored, not removed or prevented from entering the aquatic environment. There should be a limit placed on the total pollutant load (i.e. quality and volume combined), as the pollutants bioaccumulate into the environment. Diluting the discharge concentration to meet the license condition not only uses more water, it makes a mockery of any controls. There should be a requirement for technological innovation to capture and contain these dissolved heavy metals. South 32 won't make the investment required into water treatment unless they are forced to by regulatory requirements. In the meantime the cost is externalised through persistent environmental pollution and increased health risk. Allans Creeks is being used as a hazardous waste disposal unit.

If this project proceeds with polluted discharge allowed, then there should be added conditions to monitor and model the contamination, accumulation, enrichment pollution load and potential ecological risk.

Citizen science samples analysed by UWS lab have shown exceedances of the EPL water discharge license, with cobalt being a notable one as it was not included on their EPL. I have raised concerns with Illawarra EPA officers about this matter, but have not heard of any subsequent EPA sampling, license changes, ramifications or compliance action.

It is of great concern because the contamination in water can transfer to the food chain and bioaccumulate in the human body. Human exposure to heavy metals can occur through consumption of contaminated aquatic animals. Accumulation of the heavy metals in the human body even at trace levels causes neurological disorders, hormone imbalance, cardiovascular failure, kidney diseases, infertility, hair loss, endocrine disorders, respiratory and digestive problems, and cancer.

Port Kembla Harbour has been impacted by historical industrial pollution. This is not a reason to add to it with on-going and increasing water pollution today and in the future with this proposed mine expansion.

The Port Kembla inner harbour is a popular fishing spot. I've witnessed people fishing at Christy Drive at the Inner Harbour on numerous occasions, and have found significant amounts of fishing litter such as lines, hooks and bait bags along the wall.



Photos: Clean Up Australia Day March 2019, Inner Harbour wall, Christy Drive, Port Kembla

Allans Creek feeds into Port Kembla Harbour, adjacent to the proposed Hawkesbury Shelf Marine Park that includes a sanctuary zone around Flinders Island (locally known as Toothbrush due to its shape). I have augmented the map below with an arrow that shows Allans Creek, into which South 32 is currently licensed to discharge water contaminated with heavy metals.

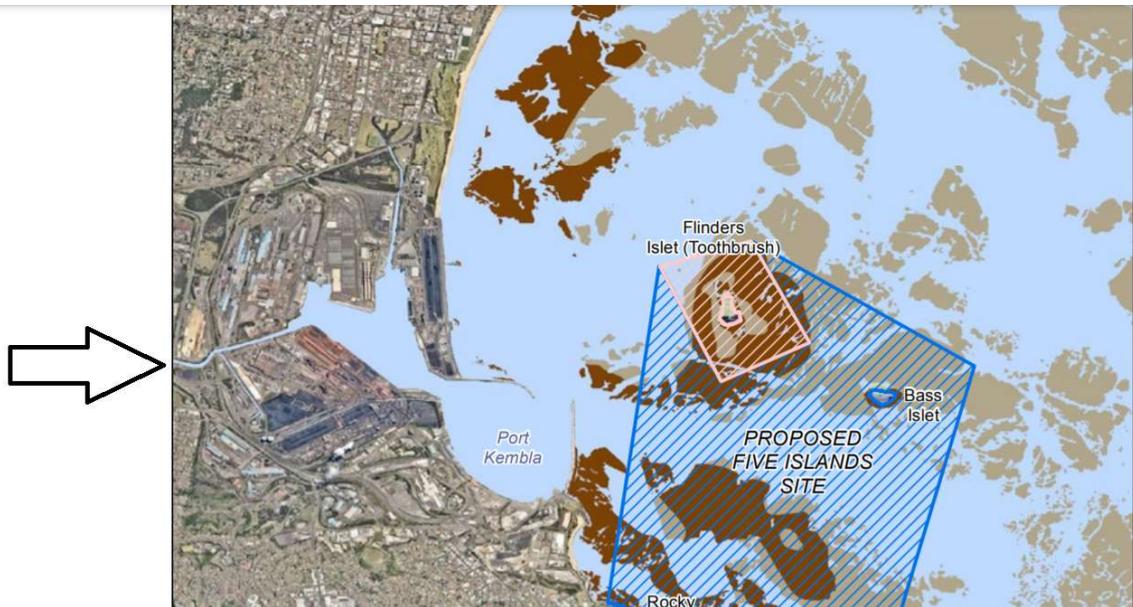


Figure: Proposed Sanctuary Zone in the Hawkesbury Shelf Marine Park  
 source: (figure 34, page 86 of the NSW Government's Hawkesbury Shelf Marine Bioregion Assessment, 2018).

[https://www.marine.nsw.gov.au/\\_data/assets/pdf\\_file/0008/821339/Hawkesbury-site-Five-Islands.pdf](https://www.marine.nsw.gov.au/_data/assets/pdf_file/0008/821339/Hawkesbury-site-Five-Islands.pdf)

The aquatic environment should be protected from persistent heavy metal pollution, for the health of marine life as well the as people that catch and eat them.

### **Water Management Performance Measures B26.**

I am concerned that South 32 has failed to maintain water management systems, as evident by the 10ML of polluted sediment dam sludge that flowed into Brandy and Water Creek, the headwaters of Allan's Creek. This incident occurred in August 2020, and the proponent was required by the EPA to prepare and submit an Environmental Assessment Report. There has been no penalty or infringement notice issued by 15<sup>th</sup> December 2020. South 32 has refused to disclose this to Council, myself or any other interested community parties. I am aware that there is a pending GIPA request (Government Information (Public Access) Act 2009), which made on 6<sup>th</sup> November, which was required to be acted upon by 9<sup>th</sup> December (20 days), however on 24<sup>th</sup> November the EPA informed the resident that due to the requirement to consult with third parties in relation to the information requested, there has been a delay till 23 December 2020. It is unfortunate that this information is not publicly available to inform consideration of the proposed conditions. South 32 staff have informed me that the pollution incident was caused by the collapse of a drain under the dam, which, like the removal of a plug, led to the Kemira Valley sediment dam emptying into Brandy and Water Creek. There is still yet to be any disclosure of why this sediment dam infrastructure was not maintained, or why it the drain collapsed. I am concerned that it could occur again.

