Submission to the Department of Planning and Infrastructure
Re**: Dargues Reef Mine Modification to Dargues Reef Gold Project (10_0054)**
By Peter Cormick, 1670 Araluen Road, Deua River Valley NSW 2537. Ph 02 44742092/0418495455
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Given a choice between the two options, of either placing all of the tailings in the TSF or placing a little more than half in mine's voids and the remainder in the TSF, I prefer the latter option. That is to say, I support one option over: 'the lesser of two evils', so to speak.

Before I could support the paste fill option outright, I would need satisfactory answers to the questions asked below.

1. **Will the Department itself be scrutinizing the claims made in the proposed modification and involve itself directly in addressing and responding to the questions and concerns expressed in the submissions it receives or will it be relying on the assessment and responses of the proponent?**

2. **Why do the "Tailings Characteristics", shown in Table 3 at section 2.2.3.2 of the proposal, not list amyl xanthate? What will its ppm presence be?** Also, Table 6 at section 2.2.3.5 sets out "Toxicity Characteristics Leaching Procedure Test Results" but, again, amyl xanthate is not included in the list. And yet again, at Table 7, "Paste fill Leachate Characteristics", there is no mention of amyl xanthate. **Why is that?**

3. In the Executive Summary to the Modification proposal, we are told that "The tailings has been classified in accordance with the *Waste Classification Guidelines* as General Solid Waste (non-putrescible) and an analysis of the leachate that would be generated by the paste indicates that there would be no significant adverse groundwater quality impacts". And, in relation to "Groundwater", we are told that "Test work results on leachate chemistry were analysed by Hydrobiology (2012) who confirm that the anticipated worst-case chemical composition of the leachate that would be leached from the paste fill would comply with the ANZECC and ARMCANZ (2000) trigger values for the protection of 95% of aquatic species for all relevant elements except aluminium, mercury and silver." **What of these levels of Al, Hg and Ag – how far above the trigger values are they expected to be - and what are there estimated impacts? And, again, what of the xanthate presence and its impact?** To continue: "The levels of those three elements are sufficiently low that the leachate is unlikely to result in significant adverse groundwater quality-related impacts." And, further, we are told that "In light of the above, the Proponent contends that the proposed modification would not result in significant adverse impacts to threatened species, Endangered Ecological Communities or groundwater dependent ecosystems." (emphases added) **In meaningful statistical terms, what is meant by "significant" and "unlikely", in the quoted passages?**

4. **What regard has been given to the consequences of the paste fill decomposing over time?**

[I would like to express my displeasure at the Department's attitude to public consultation in the matter of this proposed modification. Prior to the commencement of the exhibition period I phoned the Department to ask if exhibition of the proposal could be advertised in the Eurobodalla's local media, in addition to its intended publication in the *Braidwood Times*. I was told that "there is no need to do that as the modification will not affect Eurobodalla"!]

Peter Cormick
