Submission to Bulga Coal (BCC) Open-Cut Operations Expansion.

In the EIS for this project BCC have used Global Acoustics to assess the likely noise impacts.
It is well-known that sleep disturbance due to low-frequency noise is the issue of concern to most residents.
In the BCC EIS it states the NSW INP criteria for Low Frequency noise will be applied as per the current INP which includes a modification factor to be applied where there is significant LF impact.
Current INP states that where the *difference* between A-weighted and C-weighted measured sound exceeds 15 "5" will be added to the A-weighted reading to arrive at a number consistent with *"impact".*

They then introduce the concept of a "different" way to assess the need to apply the modifying "5"factor and refer to a paper written by Norm Broner in which he seeks to argue that an absolute value of "60" LCeq15 is acceptable. And he states "it is recommended" (by Norm Broner? i.e. his personal opinion) that number should be adopted to assess LF impact.

This argument is persuasive for DoPI and mines, generally, because they state current criteria in NSW INP are "onerous" for the mine. In other, plainer words, they seek to have apparently acceptable impact by mining widened to give mines more ability to make noise without breaching guidelines.

To achieve this end in the BCC EIS they propose that; only when the LCeq15 exceeds "60" should the modification factor be applied.
On this basis they conclude "there is no sleep disturbance predicted"

At the end of 2011 and early 2012, as a result of increasing complaints of sleep disturbance by Bulga residents through activities of the Mount Thorley Warkworth Operations, an Independent Noise study was undertaken in Bulga by Sinclair Knight Merz (SKM).
Eight separate locations in and around Bulga Village were monitored utilising either a BarnOwl directional monitor or real-time Ngara monitors. The Ngara monitors produced data (A and C weighted) 24 hours a day. Many residents had their own hand-held monitors (Digitech type 2) sound level meters. These meters showed a very high correlation with the data being produced at the Ngara monitors. During the study, most residents kept a log of disturbance incidents noting date/time/weather conditions and readings both A and C weighted, taken on personal monitors.

At the end of this study data was collated and it was concluded by SKM that "under current NSW INP criterion two properties were *significantly impacted* by Low Frequency Noise. They went on to further conclude that; if the "Broner" criterion was applied there was *no impact*!
Perusal of complaints to both the mine and DoPI during this period clearly shows residents were regularly, being woken and kept awake by mine-noise! I.E. They were "impacted"
The word "impact" relates to the effect of the noise. The effect cannot be changed simply by moving the goalposts and manipulating numbers!

So it is with "IMPACT" it is not lessened simply because someone has changed the way the numbers are manipulated that does not change the effect, only the number. The nonsensical conclusion of the SKM report is an example of such thinking.

Following the Independent Noise Study all the logged data from each 24 hour Ngara monitor at each property was made available. However, SKM chose to discard that data. However it has been possible with the use of that data and the resident's logs of events to show, quite clearly, that when noise impact was most felt ("impact") there was a difference between A and C weighted

data that was greater than 15. The correlation of times, dates and readings was extremely close. This showed that FELT impact of Low Frequency Noise was registered when the C minus A number was greater than 15 Quite often, the C weighted reading was less than 60 but, nonetheless Low Frequency Impact was experienced. In the experience of the residents, dbC of 60 or greater was intolerable! To use that as the threshold for modification would substantially under-estimate "Impact"

However this EIS begins by stating "The Noise Impact Assessment has been undertaken in accordance with NSW INP then goes on to use a modifying criterion which is not "in accordance with NSW INP".
I do not think the purpose of the EIS should be to attempt to change NSW INP by subterfuge in order to allow more noise and to manipulate figures such that they claim "less impact" when the "impact" is the same regardless of lesser numbers achieved through the application of The "Broner Criterion".