20 June 2013

Wayne McCauley
122 Dickson Road
JILLIBY NSW 2259

Director
Major Projects Assessment
Mining & Industry Projects
NSW Department of Planning and Infrastructure
(via Online email submission)

WALLARAH 2 COAL PROJECT – ENVIRONMENTAL IMPACT STATEMENT DATED APRIL 2013

In the limited time frame that I have had to review the EIS (all 3,572 pages) since becoming aware of its publication for public comment I offer the following comments in support of my request that it be rejected.

While the document supposedly went on public exhibition on 26 April 2013 I did not become aware of its exhibition until around 5 May 2013. I have been regularly reviewing both the Wallarah 2 website and the Major Projects section of the Department of Planning website and I am certain that I looked at the Wallarah 2 website at this time (5 May) and there was no reference in the planning section of the website to the fact that the EIS was on public exhibition (in fact this section of the website still fails to state in the planning stages that it is on public exhibition).

Due to the size of this EIS I have not been able to thoroughly review each and every section to the extent that I would have liked but am sure that the points that I raise below are representative of the general failings of this EIS to fully and comprehensively meet the requirements of the DGR's. I trust that there will be other respondents that address areas that I am unable to cover due to lack of time or knowledge on particular issues.

Perhaps my understanding of the English language is lacking compared with the supposed experts that have prepared this EIS and reviewed it but I can find no specific mention in the PAC report on the previous EIS that it "was recommended for approval by the Planning Assessment Commission expert panel" as stated in the Executive Summary Introduction and Section 1.2 Previous Application.
In fact the PAC report states:
"*The Commission wishes to express its disappointment at the level of information provided in the EA. ……*
In summary, the Commission recommends that:

1. ***If the proposal is approved****, …*", (highlighting added)

and goes on to define a further 39 detailed recommendations on issues that need to be addressed. While it is accepted that the PAC does not reject the proposal they do not "Recommend" it either. This is one of many examples of the Proponent taking liberties with the facts and needs to be given thorough consideration in the assessment of this EIS.

The Proponent in the Executive Summary section Existing Environment Regional Setting page iii states that "The F3 Freeway and Main Northern Railway Line run generally north – south, adjacent to the eastern extent of the Project Boundary …" I would suggest that the F3 Freeway runs through the Project Boundary as clearly documented on Figure 2.

The Proponent in the Executive Summary section Catchment page iv states "The Project Extraction Area … represents about 5% of the total catchment area of the Scheme." (the scheme being the Central Coast Water Supply) implying that potential effected area is small compared with the total catchment but fails to mention the area of the catchment upstream of the Project

Extraction Area which is more important in consideration of the water catchment area. If the Project Extraction Area significantly affects the water supply by interrupting flow to the Mardi pump station on the Wyong River then any supply from the upper catchment is also significantly effected. I would also suggest that it is not the Project Extraction Area that needs to be considered but the Project Area effected by subsidence arguably defined by the Proponent as the Subsidence Impact Limit although I would suggest that this should extend out to zero subsidence and not the 20mm nominated by the Proponent.

EIS Main Report

The detail in Figure 5 on Page 11 and Figure 7 on Page 16 shows a highlighted area as being owned by the Proponent when in fact it is not (refer to the highlighted area extending over Jilliby Jilliby Creek from Land ID 1 onto Land ID 278 & 279). The highlighting is either incorrect or the diagram showing the location of the Jilliby Jilliby Creek is incorrect. As the owner of one of these parcels of land I know my boundary extends to the creek. This issue is repeated again in Figure 36 on page 158, Figure 45 on page 199, Figure 46 on page 204 and in Figure 1 of Appendix P.

The table following Figure 7 also notes that certain lots/parcels of land have no residence and again this is incorrect (refer to lots identified as 260, 283 and 284 on Jilliby Road – while ID 260 is used for a number of land parcels in the valley the lot on Jilliby Road adjacent to 283 and 284 and these lots as depicted in the figure do actually have residences on them). Again another example of the Proponent failing to correctly document the facts, if it cannot get these clear and straight forward details correct what confidence should we have on the more difficult and theoretical matters.

The Proponent regularly states that it provides ongoing and thorough community consultation and the distribution of information and Newsletters. As I pointed out in my submission on the previous EIS, all the Newsletters have not physically been delivered to my address and since then of the 4 Newsletters issued only one has physically been delivered. As I stated in my submission on the previous EIS as an owner and resident of land direct above the proposed long wall mine I fail to see how community consultation is effective if I am not receiving these documents. No doubt the Proponent will respond that it places advertisements in the local newspapers but again it needs to be known that the local newspaper is not delivered to the majority of residents of the Valleys and thus any communication in the local newspaper is not effective.

Section 2.6.2 provides details of average rainfall for the Central Coast and details rainfall from Peats Ridge, I question why the rainfall data from the recording station on Jilliby Creek (BOM Station ID 061380) is not used for the rainfall data.

Section 3.1 states that "*Development consent is sought for a period of 28 years ...*" and "*A further planning approval will be required to enable continuation mining beyond Year 28.*", if mining is envisaged to go beyond 28 years why is this not clearly documented and included within this EIS and development application.

Section 3.2.1 states that "*The headings are either permanent tunnels for access and services throughout the mine life or temporary tunnels for access to the longwall panel. The permanent headings do not result in any surface subsidence.*" How is subsidence above these headings prevented when the diagrams show similar widths for the headings to the longwall panels. Where is the subsidence above the temporary headings documented as the detailed description of subsidence only appears to cover the actual longwall panels. As the longwall panel is mined what stops the goaf from extending into the heading. The Subsidence Predictions and Impact Assessment appendix states that the subsidence effects extend out at an angle of 26.5 degrees from the edge of the longwall panel so how does the area above the heading not experience any surface subsidence.

Section 3.2.2 Page 36 states that "*Panel widths can be varied along the length of a panel …*" please clarify how this can occur when the mine layouts and schematics (eg Figure 16) show rectangular longwall panels formed by parallel roadways, these roadways being formed first for each longwall panel and the panel being mined from the far end back to the main heading viz the parallel edges of the panel are formed before the longwall panel is mined. It is also noted that none of the analysis presented in Appendix G appears to consider anything other than a parallel rectangular panel of a specified width.

In Section 3.3.3 (and also in Appendix D) there is a comment that approval is sought for other plans which are not detailed and it is specifically requested that any detail not clearly spelt out in this EIS not be approved. If the Proponent has other plans why does it not present them in detail in the EIS so that they can be examined and commented upon.

Section 3.3 states that "*actual equipment utilised for the Project may vary*" it is specifically requested that any equipment not equivalent to that in Table 7 (in terms of environmental impacts – noise, vibration emissions etc) not be allowed to be used without full consideration of any impacts on the details in this EIS and consultation of all stakeholders.

Section 3.4.4 contains a somewhat hidden additional and significant source of environmental risk, it states that "*To assist in reducing the regional transport of coal by road, the Project may also potentially facilitate the receipt, stockpiling and rail transport of coal from other mines in the vicinity within the coal handling approval limits sought in this Development Application. The gaining of any required approvals associated with the transportation of coal to the Tooheys Road Site from other coal producers or for any additional required infrastructure at the site is not part of this application and would be the responsibility of the proponent seeking to utilise this facility*.". It is noted that this fact was more clearly spelt out in the referral to the Australian Government (Document ref 111013 Wallarah Background Document – Attachment B to the referral dated 16 May 2012 available on the DPI website under this DA). This proposal would significantly increase the effects of coal dust, noise and traffic impacts around the Tooheys Road site which have not been documented in this EIS. I would suggest that at no previous point in time has this proposal been made known to the community even though the Proponent is at pains to point out its open transparent communication with the community.

Section 3.4.5 states that gas will be flared initially as indicated on Figure 19 – Figure 19 does not provide any information in relation to gas flaring. Another example of failure to ensure correct documentation by the Proponent. Please clarify the proposal for underground boreholes to capture gas in the pre-mining period – are these drilled from above ground or completely underground with no disturbance to above ground areas. I note that the Proponent has taken a step back from its previously advised intention to utilise the gas from the mine for power generation to now only stating that "*commercial opportunities may become available for gas management and utilisation*".

Section 3.9.4 states that the salts in the brine are returned to the original location from which they came namely the coal seams but does not clearly state that it is done so in a much more concentrated manner in a much smaller area, thus if any leaching from the water table occurs into this area the saline water will be highly concentrated. This section states that 2 of the 5 headings will be used for brine/salt storage but the detail shown on Figure 18 shows only one area for underground water storage.

Figure 18 shows a 38 year time frame for mining yet the main comments in the EIS are for a 28 year project life of the mine, what is the intention, why is the Proponent stating one thing in one section and something different elsewhere, if it can't be consistent on this what is to be believed.

Section 3.11 states that the clean excavated waste rock will be used for site works yet section 3.12 states that it will be stockpiled and trucked offsite, again why is the proponent stating one thing in one section and something different elsewhere, if it can't be consistent on this what is to be believed.

I note that Figure 23 incorrectly nominates the north end of Dickson Road as Buangi Road, again a failure on the part of the Proponent to get easily discernible factual details correct.

Section 3.13 lists under Option 1 that the "Do Nothing" alternative "*is not considered to meet the Objects of the EP&A Act*". I would point out that the Act has more than the sole Object of encouraging the proper development of natural resources viz coal mining but also the proper management and conservation of agricultural land, natural areas, forests, water and villages

Section 4.1.10 state that "*The Project will have no impact on the existing or proposed use of land above the Extraction Area*" I would contend that it is not possible to make such a Guarantee ("**will have no impact**") and the EIS specifically states that subsistence effects will occur. The section goes on to state that "*The Project has been designed to minimise as far as practical its impact on water, …*" in relation to SEPP Clause 14 a) requirements which specifically states "*that impacts … are avoided or minimised to the greatest extent practicable*", I would contend that it has not been designed to minimise impacts to the greatest extent possible as it is clearly stated in Section 3.13.2 Option 2 that this option "*would generally result in a lower level of surface subsidence above the*

Extraction Area" and thus impact on water resources and other land use but this option has been rejected by the Proponent.
Section 4.7 Table 14 notes that the Minister has delegated his approval functions for most SSD to the PAC. I fail to see the point of this note when there is nothing in either the DGR issued on 12 January 2012 or supplementary DGR's issued on 11 July 2012 to state this is the case for this EIS. Has this application been delegated or not.
Section 5.3.3 discusses Newsletters and their distribution of approx. 5200 Newsletter, how does this relate to the number of households in the direct impact area. We have only received 1 newsletter in the letter box during the period since the rejection of the previous EIS.
Figure 27 shows the coal seam as being parallel to the ground surface how representative of actual geology and the proposed mining is this, the figure shows the ground surface as horizontal which is not the case - what difference will arise in subsidence due to this difference in the ground surface not being even. I would suggest that further description of the detail in this figure is required to clearly describe what is occurring and that it is an "ideal/theoretical" depiction. Data in Appendix H clearly shows that the coal seam is not level and varies in depth between 320m to 500m AHD and that the surface topography varies in height by up to 150m.
Figure 28 fails to show culverts under Dickson Road at my and one of my neighbours properties but shows a similar culvert at another neighbours property. These culverts were either reinstalled or added when the road was covered with asphalt and thus should be readily known.
Section 7.1.2 discusses the computer simulation models and the validation of them by undertaking comparison to actual subsidence in the Hunter Valley and Southern Coalfields when earlier in the discussion it is stated that neither the Hunter Valley nor Southern Coalfields have similar geology and therefore predictions by ACA and others using information from these areas is not realistic. If the Proponent uses this argument to debunk the predictions of others how can it use the same geological data to validate it's model. It is stated that SCT determined that a 65m pillar with cut throughs at 100m intervals is approximately equal to the strength of a 55m continuous pillar, on what basis is this approximation determined if the geology of the proposed Project is not equivalent to any other known mine site. Please provide the basis of the geological factors used to calibrate the FLAC model with the "standard" IPM model – if the validation is based on assumption which are incorrect how can further "fudge factors" be considered to be any more correct.
Section 7.1.3 Table 25 - What is the basis of applying a factor of 15 to obtain tensile and compressive strains from the hogging and sagging curvatures. The reference to this value used in the Southern Coalfields is considered unreliable when the Proponent regularly states that the Southern Coalfield geology cannot be compared to the geology of the Project area.
Page 104 states that there is predicted to be maximum subsidence of 175mm in the Wyong River and also 150mm upsidence and then goes on to state this is a net subsidence of 25mm and that this is negligible. I would contend that if one section of the river subsides 175mm and the adjacent section upsides 150mm this results in a change in level of 325mm which could not be considered negligible and will have an impact on the river flow, and all this in an area that is not directly above the proposed longwall mining so the effect on creeks directly above the longwall mining are likely to be extreme and significantly effect creek flow.
Page 105 states that there is predicted to be a change in cross gradient of sealed roads of 0.9% and states that this is less than normal cross fall for drainage and therefore will have no impact, I would contend that if the predicted change leads to formation of ponding on sealed roads this is likely to result in increased accidents due to aquaplaning and loss of traction and is therefore a significant issue and risk to public safety.
Page 107 makes no mention of proposed fibre-optic cable for the NBN – why has this not been considered.
Page 108 states that the maximum change in freeboard for farm dams is 500mm, the sensitivity analysis on page 109/110 then goes on to state that the maximum change in freeboard height after doubling the subsidence effects is still only 500mm. I contend that this is in error and that a change in freeboard will occur if the subsidence effects are doubled.
Page 110 I would suggest that Quarterly reporting of predicted versus measured actual subsidence needs to occur for the entire time of mining and not just the first 5 years as the geology of the extraction area is stated as being different in the nominated 3 areas.

Table 33 on page 118 again lists a mining period in excess of the previously stated 28 years (38+ years is stated) why the discrepancy in mining period to that requested in this development application.
Clause 7.2.4 page 123 states that "*If faulting is present, mine planning will be revisited to develop appropriate management and minimisation measures*" does this also include the complete cessation of mining.
Clause 7.2.4 refers to the lack of adequate data due to the inability to access more bores etc, the previous PAC report, the Strategic Inquiry and other documents reviewing the previous EIS all referred to the lack of data and that additional data was required to properly assess the EIS – what actions has the proponent taken to obtain access to the other bore sites or properties to obtain more data, no detail is provided in this EIS of any attempt to obtain data and any refusals thereof. A number of the previous documents all stated that a number of years of baseline data was required prior to commencing mining and putting in place additional data recording at some time in the future does not appear to address this issue.
Page 123 Mitigation measures - Any damage to private bores should result in replacing the water supply to compensate for the water losses whether or not the damage exceeds the predicted levels or not.
Page 126 Proposed Water Management System – How does the predicted peak in groundwater runoff of 2.5ML/day correlate with the actual runoff experienced during the June 2007 long weekend rainfall and flooding, Why is the brine treatment plant only to be operational for 14 years and not the entire time period of the mining operations. How does the 100 year ARI 72 hour storm event compare to the June 2007 long weekend rainfall.
Clause 7.3.3 page 133 states that subsidence effects will impact on surface water and result in a loss of 300ML/year whereas the Proponent has regularly stated that there will be no effects on surface water.
Page 132 the water treatment plant should treat water to the same if not better than Wallarah Creek water quality and not just "s*imilar*".
Table 42 on page 141 refers to various dwellings by number but nowhere in the EIS is this number related to an actual property address or location, hardly an example of effective communication.
Similarly Table 44 on page 143 refers to various road low points by number but the actual location of these is not readily identified and it is only by searching through the Flood Impact Assessment Appendix K that one is able to find where the low points are, the table should reference where the identification can be found at the very least if not providing the actual detail.
Page 146 – How representative of the Project area are the data from Cooranbong, Norah Head and Williamtown, why was no actual data for the Project Area recorded and used. If project location data was collected for a number of years and shown to be equivalent to that for these other locations then there could be no argument, as previously noted many reports have stated that more project location specific data needed to be collected, why has this not been done by the Proponent.
Clause 7.5.2 Page 147 - A statement is made that "*compliance with the air quality criteria during the operational period will ensure that the criteria are complied with during the construction period.*" I contend that compliance in the construction period is predicated on the measures that are put in place during the construction period and has nothing to do with compliance during the operational period, I would accept that it should be easier to comply during the construction period based on the nominated 35% lower emission level but it does not necessarily follow that if the Proponent achieves compliance in the operational period that it would have necessarily achieved it during the construction period. Yet another distortion by the Proponent in order to present a better view of it's proposal.
A similar statement is made again in Clause 7.5.3 on page 148, I again contend that compliance during operational phase has no bearing on the construction phase and these types of statements should be a basis for the rejection of the EIS and mining proposal. Monitoring of air quality and dust emissions needs to occur during the construction period and methods need to be put in place to eliminate or minimise dust generating activities during the construction period.
Page 148 Coal Haulage - I would contend that any studies of dust from coal trains in central Queensland has little if any relevance to coal haulage in the NSW Central Coast as the coal in central Queensland is significantly different to that which will be mined under this proposal –

Queensland coal is considered to be “sticky” and therefore is likely to have far less dust than that which will be mined here.
Page 150 Section 7.6.4 I would contend that the Energy and Greenhouse Strategy should be prior to commencement of extraction and not within two years after commencement.
Page 155 Section 7.7.3 concludes that “*The increase in risk of daily mortality … is estimated to be approximately 1 in 100,000.*” I would contend that any increase in mortality is unacceptable and should be the basis for rejection of the development application.
Page 161 Section 7.8.3 Project Operational Noise – I would contend that loading of coal trains will not occur with locomotives and wagons stationary on the rail loop as stated as the train has to move past the loading bins to load the train and thus the train is moving and the noise levels generated will not be constant as is the case of a stationary train with the locomotives engines idling but will increase and decrease as the engines are powered up (it is noted that the Proponent states that the train will be loaded on an upgrade and thus the locomotives will have to throttle up as the load increases). Also there is the likelihood of wheel rail noise as the train negotiates the curves in the loop, while the size of the curve radius of the loop will assist in minimising wheel squeal it will not eliminate it. There will also be a variable noise generated by the loading of the wagons as the coal loading chute is opened and closed to account for the gaps between the wagon hoppers.
Page 166 Field Surveys - notes that “*Permission to access private property was sought through surveys and direct interviews with landowners. Despite these endeavours, WACJV was unable to obtain access to private properties above the Subsidence Impact Limit.*”. It would be more appropriate to provide details of these endeavours then just make the statement – as an owner and occupier of a property above the mine extraction area I am not aware of any approach to either myself or my neighbours.
Page 169 states that the threatened “*fauna*” species are shown in figure 40 when in fact it is the “*flora*” species in this figure.
Page 187 Section 7.11.4 states that if perceptible impacts are observed during site monitoring activities then if it is determined to be mining related that the relevant government authorities will be notified, I would suggest that if any impacts are observed that they should be notified to the relevant government authority even if they are not mining related – this is just good corporate citizenship and I would suggest that the Proponent would want to demonstrate this.
Page 190 Section 7.12.2 states that traffic data (AADT) for key roads for the period up to 2004 was utilised, I would suggest that between 2004 and 2012 significant increases in traffic have occurred in the area due to the significant population increase due to increased housing in the Blue Haven – Warnervale area.
Page 193 Section 7.12.4 – Traffic management activities need to be put in place for the Western Ventilation Shaft site during construction to ensure that traffic flows are minimised or construction traffic is not to occur within school arrival and departure times due to the narrow Jilliby Road for safety reasons. Mention is made of improvements to road intersection including for access to the Western Ventilation Shaft site with details contained in Appendix Q, however no road improvements to the Jilliby Road / Little Jilliby Road intersection can be found in Appendix Q.
Page 250 Section 7.26.2 The LA_{max} requirements of the EPA licences issued to ARTC and RailCorp are 87dBA at 15 m from the locomotive measured in accordance with AS3722 and not 85dBA at 100 m as stated. It is noted that the licences have a goal of 80dBA LA_{max} and 60dBA $LA_{eq\ 24hr}$ at 1m from the façade of nearest effected residential property.

Section 6 / Appendix F
Who were the participants in the risk assessment, what is there experience in undertaking risk assessments, what is their relevant experience in the industry areas in which they are offering opinions on risks, when was it conducted, where is this documented.
What is the engagement with stakeholders mentioned in the report, where is this documented.
Why are there a number of risks/issues that have not been evaluated in the Preliminary Risk Assessment but are done so now. The whole point of the Risk Assessment standard and the guidelines published by Australian Standards is to communicate with “All” stakeholders to establish the context and identify the risks at the start of the process.

I would suggest that the consequences for "*Unplanned movement of land resulting in significant environmental effects*" by definition needs to be higher than "3" based on the definitions in the Consequence Scale.
I would suggest that it is rare that the control measures will impact on the consequence and thus the "*Groundwater inflow into underground workings*" consequence should not lessen from "3" to "5". What methods have been implemented to supposedly reduce the consequence, while the likelihood may be reduced by diverting water around the operations if water does infiltrate the underground workings how is the consequence reduced.
I would suggest that the Descriptions in the Likelihood table do not correlate with the Indicative Frequency, eg "*The event might occur once in your career*" and "*Once every ten years*" are somewhat at odds – whose career only lasts 10 years.
The risk assessment should include a monitoring and review section as well as detailing who is responsible for implementing each of the risk treatments.
I would suggest that there are considerable more risks involved in this project that should be included in the Risk Assessment – where are the risks related to the physical activities of underground mining, where are the risks of loading of coal trains, where are the risks of the construction activities in building the mine, etc. The Preliminary Hazard Analysis (Appendix AB) does not cover these risks.
On the basis of the above comments I believe the risk assessment is flawed and can not be relied upon.

Appendix G
Section 1.1 states "*The Project team …. was determined from the outset to formulate a mine plan that avoided and did not cause impact on these important resources.*" I would suggest that the Project Team have failed to meet this requirement as there are clearly impacts on the "*important resources*" ie subsidence will occur, thus by the project team's own words and evidence they have failed to meet their own requirements and avoided impact and thus should not proceed with the project.
Section 3.6 is headed The Forest Case yet the text in the first paragraph states "*this case is called the Valley case*", how many other errors are in the EIS.

Appendix H Subsidence Predictions and Impact Assessment
Table 1.2 states that particular requirements of the DGR's are addressed in the "*Subsidence Prediction Report*" and the "*Subsidence Impact Report*" there are no such identifiable reports contained in the Proponent's EIS. If the Proponent cannot correctly identify where the DGR's are addressed what should we believe.
Section 2.2 states that "*minor springs or seeps may occur … as described in the Wallarah 2 Hydromorphology Study Report (IEC 2012)*", no such report is included in the list of Appendices in the EIS.
Section 2.14.2 states that "*There are no swamps or wetlands that have been identified in the Study Area*" yet Figure 39 of the EIS shows what is labelled Swamp Mahogany Swamp Forest between Dickson Road and Jilliby Jilliby Creek, in the Buttonderry site and in the Tooheys Road site, if they are swamp forests then surely there must be swamps.
Section 2.5.2 Table 2.3 States that Little Jilliby Road is "*Not directly mined beneath*" however the headings for the longwall panels are mined beneath Little Jilliby Road, there is no mention of mining beneath Watagan Forest Drive.
Section 2.5.3 and Drawing MSEC 515-12 fail to note the existence of 3 drainage culverts under Dickson Road east of the one culvert on Dickson Road shown on the drawing. These 3 culverts have caused flooding in the past and I believe that definitely one of them is lower than the culvert shown on the drawing and thus is more likely to be of significance in the flood studies. It is considered that knowledge of these culverts would not be difficult to obtain and thus why they are not shown or known is unexplainable and another failure of the Proponent to correctly identify easily known factual information.
Section 3.1 makes detailed mention of the fact that subsidence cannot be reliably predicted for "*non-conventional subsidence*" where by definition the coal seam is not level and the topography is not flat which in my opinion is the situation in the Project Area and is confirmed by Drawing

MSEC515-03, thus there can be no guarantee as proposed by the Proponent that the subsidence levels are accurate or that there will be no impact on the water supply.
Section 5.23.4 lists an "*Aviary*" being "*Highland Park Aviary*" whereas Drawing MSEC515-19 lists "*Highland Park Apiary*", I understand the business to be "Highland Park Apiary", again another example of the Proponent not getting easily identifiable factual data correct or consistency within their own documentation.
Tables in Appendix D identify various houses, farm buildings and farm dams by number but there is nowhere any correlation between the number and the actual location to allow confirmation of the correctness of the data stated.
Drawing MSEC515-14 incorrectly marks the location of Jilliby Public School and Jilliby Cemetery, another example of the Proponent getting easily discernible factual data incorrect, what other easily discernible factual data has the Proponent got wrong.
Appendix G – Peer Review
I note that Mr Hebblewhite's review is dated 10 July 2012 and is in relation to Rev 3 of the Subsidence Predictions and Impact Assessment (SPIA) and a March 2012 Draft Report on Subsidence Modelling Study whereas the SPIA document in the EIS is Rev B (note there are 3 revisions between the SPIA report provide to Mr Hebblewhite and the one in the EIS – there is no record of what amendments have been made between the various revisions so it is unclear how Mr Hebblewhite's comments have been addressed). I subsequently note that Mr Hebblewhite has updated his review on 5 October 2012 but still in relation to Rev 3 of the SPIA report even though Rev 4 was issued before this update it does not appear to have been reviewed). There is no revision record documented between the March 2012 Draft Report and the report in the EIS.
Page 257 Comment in relation to Page 64 - On what basis does the Proponent and the Peer Reviewer conclude that fracturing will occur only up to 200m above the mining horizon surely this should be related to a geological formation/structure and not simply a dimension as this statement implies. I would contend that the dimension above the mining horizon will be variable depending upon the geology of the overburden.
Page 260 Comment in relation to Page 4 – It is heartening to see the Peer Reviewer concur that it is inappropriate to state that the geology in the Project area is different to the other coalfields and then use data from the other coalfields to calibrate/validate the model.
Page 260 Comment in relation to Page 12 – It is heartening to see the Peer Reviewer to put forward a view similar to the one I made in my submission on the previous EIS that "*… it is never possible to fully define the overburden geological and geotechnical domain …*" and thus I contend that there can be no guarantee on the subsidence levels and effects as the Proponent regularly appears to do.
Page 260 Comment on Page 15 – Again it is heartening to see the Peer Reviewer comment on the fact that the pillars may not all yield as predicted and that analysis should be undertaken to cover this scenario – I see no evidence to support that this has been done.
Page 264 Section 6 Summary Conclusions 5th dot point – Again it is heartening to see the Peer Reviewer state "*… it is important to recognise that there are difficulties in subsidence predictions especially where extensive databases of past practices do not exist or are not directly relevant. As a result the predictions made are not without a level of uncertainty …*" I suggest that this supports my contention that the Proponent cannot provide a guarantee on the level of subsidence, its effects or the impact on the water supply as it continually appears to do. There is a level of risk involved and in my opinion in relation to any possible effects on the water supply this is totally unacceptable and thus grounds for rejection of this development.

Appendix K Flood Impact Assessment
I would like some clarification on the statement in the executive summary that "*This report is based on …. and utilises highly accurate topographic data for existing and post subsidence conditions.*" How can the "*post-subsidence conditions*" be highly accurate when they are not known as they have not occurred yet and are merely predictions based on certain assumptions which have still to be proven. The report goes on to state that it uses the upper bound (maximum) subsidence predictions so again how can the "*post-subsidence conditions*" be highly accurate if they are merely predictions.

I find it somewhat strange that the executive summary states that "*Only one additional flood event (March 2007) had occurred since the previous report …*" when a simple review will confirm that a significant flood event occurred over the June long weekend in 2007 and additional flood events have occurred since then including most recently in Jan and Feb 2013 (2 floods from Jilliby Jilliby Creek). The Aquatic Ecology Impact Assessment report also mentions flood events prior to the Autumn 2011 sampling (2 flood events) and prior to the Spring 2011 sampling.
It is interesting to note that in this document a 42 year project life is nominated when it has been generally stated that the mining project is for 28 years, why this glaring discrepancy in time frame – what time frame is intended, if the Proponent states varied time frames which do we trust.

Appendix N
Section 3.1 7th dot point states "*A rail loop that would be able to hold three (3) of the anticipated 3,400 tonne capacity trains.*" while Section 3.5 states "*The rail loop would be designed to permit continuous controlled train loading and parking for two (2) additional trains.*" Which of these statements is correct as the second implies that a total length of the loop is at least the length of 4 trains, 2 trains parked and a third train in the process of loading and thus the loop could handle 4 parked trains 2 outbound from the loader and 2 inbound to the loader while the former implies a balloon loop length equivalent of 3 trains only. Train length will ultimately be dependent upon the type of wagon utilised with mention in the train path analysis of using either 100 tonne gross and 120 tonne gross wagons.
Section 4.5 mentions that rail noise was measured "*north of Wyong*" – where exactly was it measured as track gradient will have an impact on noise emissions from the various trains.

Appendix O
Table G1 – Other fauna species also seen in the area include:
Regent Bowerbird – Sericulus chrysocephalus (in fact it has been seen coming from the Jilliby Jilliby Creek boundary of the land owned by the Proponent in Jilliby Road so the studies could not be considered to have been complete);
Sacred Ibis – Threskiornis aethiopica.
Mention is made of feral cats, dogs, rabbits, pigs, foxes and goats but not of the feral deer (red & fallow) that are in the area, no mention is made of the various livestock in the area (horses, cattle, sheep, goats, alpacas etc) which could be seen from public roads;

Appendix P Aquatic Ecology Impact Assessment – Mentions that surveys were conducted in Autumn 2011 and lists the dates as 27/6/11 to 01/07/11, perhaps my memory is fading but I always understood that Autumn finished on 31 May and Winter started on 1 June.

Appendix U Visual Impact Assessment - I find it difficult to believe that the 32m tall by 24m x 13.5m tower building for the winder motor at the Buttonderry site (as shown on Drawing WAL-300-SK-0030 Rev D in Appendix E) will not be visible from Hue Hue Road / Sparks Road or from the houses or the properties around the Sandra Street / Amberwood Close or Buttonderry Way / The Knoll areas as stated in this Appendix. It is noted that the Proponent states that the high voltage transmission towers in the Project area are approximately 30m high in Section 2.5.8 of Appendix H and thus the tower building will be taller than the transmission towers and be of a solid construction and not the lattice construction of the transmission towers and thus more readily visible and difficult to obscure behind trees. I am not aware of many trees in the Project area that are over 30m tall and even so they would take a long period of time to reach this height and provide any screening of the building.
I can see no detailed plans for much of the infrastructure in the Tooheys Road site such as the coal loader or the crusher and thus how the visual impact from the height of these structure has been determined and consideration of its accuracy. It is assumed that Appendix E is supposed to provide all the detailed plans of the infrastructure in accordance with the DGR on Plans & Documents but obviously doesn't include this detail.

Under the Key Points – Subsidence of the DGR's is a requirement for "*accurate predictions of potential subsidence effects and impacts of the development, including a robust sensitivity analysis*

of these predictions" while the Proponent will no doubt argue this requirement has been met I would contend that the predictions are and can not be "*accurate*" due to the lack of detailed evidence and experience in mining in the particular geology of the Project Area (as noted by the Proponent itself). I would also contend that a "*robust sensitivity analysis*" has not been undertaken and in the very least has not been clearly documented, as noted above the Proponent has stated that doubling the subsidence effects resulted in no change to the freeboard of dam – hardly a robust analysis or an accurate one.

Item 11 of the Supplement to the DGR's issued on 11 July 2012 required that the Proponent provide details of any proceeding under a Commonwealth, State or Territory law against it, I can find no detail in the EIS where this requirement has been addressed and documented.

Regularly throughout the EIS there are references to the fact that the geology of the mine area is different to the geology of the Southern coalfields and the Hunter coalfields and thus that the experiences seen of subsidence and river loss of flow cannot be used in the mine area however there is also consistent use by the Proponent of data from the Southern coalfields and Newcastle/Hunter coalfields to supposedly validate and calibrate the computer simulations and also utilise experience from these other coalfields to make predictions of the subsidence and effects of the mining. I fail to see how it can be argued in the negative that data and experience from the other coalfields can be used by the opponent to the mine and then go and use the data and experience from the other coalfields as a means of validation, there needs to some level of consistency by the Proponent.

As documented above there are many examples of the Proponent getting factual data incorrect, what effect has this had on the supposedly "accurate" predictions of subsidence and the effects thereof, I believe that these are grounds for a rejection of the development application.

I note that in the local radio news (ABC Radio – Wallarah Two dismisses mine concerns as scaremongering - Thurs 6 June 7:16am AEST) in recent days it is reported "A spokesman (for the Proponent) says the independent EIS actually concludes the mine will not cause any adverse health effects" however the EIS clearly states in the Health Risk Section of the Executive Summary on page xi that "*The increase in risk of daily mortality on the worst day in the life of the Project is expect to be approximately 1 in 100,000 …*" thus there is a risk to health and therefore adverse health effects, I would further suggest that the EIS can not be considered as "independent" and this is a further example of the Proponent distorting the facts.

In conclusion I believe that the risks posed by this proposed mine are too great and that the development application should be rejected as it fails to address all the DGR's adequately and conclusively. The subsidence level and effects cannot be reliably predicted due to the limited understanding of consequences of mining under geology that is significantly different to that in other coalfields. There is insufficient historical data of water flows, dust and airborne pollution which has been mentioned in the previous PAC report as well as the Strategic Inquiry as a necessity for review, however the Proponent has failed to fully address this issue prior to resubmission of this EIS. Unfortunately I fear that the mine will be approved, despite the many shortcomings in the EIS, due to the value of the mighty dollar that flows to various levels of government and thus repeat my request from my previous response to the previous application that a substantial monetary security (cash and not bank guarantees) be put up front by the

Proponent to cover the potential risks due to subsidence, I consider that the value should be in the hundreds of millions of dollars and not just the pittance paid in the mine subsidence levies.

I trust the Department and any independent commission that reviews this response and all others will find that the Proponent has failed to fully address the requirements contained in the DGRs for the development application and thus the application should be rejected.

Wayne McCauley