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Submission to the Planning Assessment Committee 2

RE: Coalpac Consolidation Project – Coalpac Review of PAC1 Report

I have followed the DA/EA application process of the Coalpac Consolidation Project with interest – and thus have read the initial documents that Coalpac provided to the PAC1 (resulting in the recommendation for it not to be approved) and its subsequent documentation relating to its proposed Contracted Project.

As outlined in my previous submissions, I have worked as a medical practitioner in the Lithgow area for the last 14 years and have been one of the local figures who has brought the adverse health statistics of this region into broader public focus. As presented in my previous submissions, they are nothing short of dramatic – and a real cause for concern for the Local Health District. That is, the communities of the Lithgow region warrant special health attention – because they are already carrying a heavy health burden – with a significant proportion of this highly likely to relate to long-term industrial environmental exposures. If the PAC2 panel are not aware of these health issues relating to the Lithgow region, then it would be important to read at least my submission to the PAC1, where they are outlined in more detail.

There is increasing medical evidence that living near coal mining (especially open cut) and coal burning industries is harmful to human health across a variety of fronts (1,2). The PAC1 appropriately recognised Coalpac's position in this regards as warranting particular consideration – both in terms of its proximity to a population centre and the health characteristics of this population.

I have mainly focussed on the revised air quality and noise reports in the proposed Contracted Project. While I am not an expert in these fields, I can offer a related professional's careful examination of the information provided. Rather than the issues I raise being definitive statements with regards to the technicalities of the reports, I would suggest they point to issues that need further consideration than is currently available from the information provided.

It should be recognised that the revised reports for air quality and noise are mainly limited to revisions in predictions for Year 2 of the project. That is, no substantive statements are made to alter the information previously provided for the other 19 years of the proposed project.

Thus if there is no substantive new information available that would alter the impressions inferred from the Contracted Projects reports, then I would hold that my final conclusion about the Contracted Project is sound from a health perspective – that it should be rejected.

<u>Air Quality Impact Report</u> (Pacific Environment)

Jane Barnett for Pacific Environment has re-calculated the air quality figures relating to Year 2 of the Contracted Project and reports improvements in air quality impacts for this year.

What is not so clear is whether, or the extent to which, these could relate mainly to methodological differences:

"By way of conclusion, the modeling completed for the EA was significantly more conservative than that completed for the Contracted Project using the NSW EPA's suggested approach, and resulted in a reduction in TSP emissions modeled for Year 2 of 50%."

It is thus unclear as to whether these changes could just relate two differing methods to calculate air quality, and the extent to which such variations have affected the results. If so, we may not be comparing apples with apples – and the significance of data differences become difficult to determine. It also demonstrates the potential elasticity of results derived from varying modeling methodologies – which is not exactly comforting.

It is also noted that, "The EA modeling was conducted well in advance of this process. A high level of conservatism was applied to the EA modeling, which I believed to be sufficient to make unnecessary any requirement to carry out such analysis in order to appropriately assess impacts. Measurements made on 31 January 2013 confirmed this to be the case." P. 7 of Air Quality Impact Report.

It may be highly relevant that by January 2013, Coalpac had downscaled its mining operations significantly – pending the PAC process. Thus the site specific measurements that were used from January 2013 as comparative data may not be representative of the usual operations of the mine – and thus may have under-represented the air quality issues of the previous usual mining operations.

Moreover, with regards especially to the Hillcroft area being excluded under the Contracted Project, one would be particularly interested in the data for the

residences that lie to the north of the project – given the prevailing W / SW winds. However no data is available for most of these residences on the data tables provided, as the data sets start at residence 169 for no explained reason. Most of the residences to the north/east are marked as 1- 180. Of the residences mentioned in the data tables only 169 - ?180 could be envisaged to be in the lee of these general wind directions – and these were the residences that still had readings that more often exceeded the threshold standards. Why the data sets for $\sim \frac{1}{4}$ of the residences are excluded is not explained.

I sought clarification of the above issues from Pacific Environment and Hansen Bailey and was not offered a response.

Putting the above questions to the side for the moment, on the modeling provided, the Contracted Project results in positive shifts in the data sets for Year 2. However given general weather patterns and the remaining years and extent of the project, it is hard to see how the Contracted Project would improve the profile of the main population centre of Cullen Bullen – which remains very close to the mine ~1km in places. This remains problematic.

Given these issues with the report, the modeling thus appears as a black box, with many of the seemingly important pieces of information not available for examination. It is thus difficult to be able to understand the basis for the derived conclusions – and, I would suggest, for them to be accepted these issues would need to be more clearly explicated.

Even if we accept that the proposed changes of the Contracted Project are accurately modeled for Year 2 and show an air quality improvement, where do we stand?

We still have a large open-cut mine that for 270 degrees encircles a rural township in very close proximity, with progressive effects over 20 years.

The revised data analysis only relates to Year 2 of the project – presumably the year where the impacts from the Hillcroft mine would have been greatest. It should be remembered that this mine has a 20-year plan (without any extensions that could, and are often, sought). So the previously submitted data for the other 19+ years of operation remain in question – and these were far from optimal.

The main bulk of the air quality data would thus appear unchanged. It is thus important that the possible improvements noted in the revised report about the predicted air quality profiles in Year 2 of the Contracted Project do not inappropriately distort the remaining overall (negative) implications of the entire Contracted Project.

The author cites as grounds for her expertise that she has completed (presumably similar) modeling reports for a whole host of other mines – many of

which form some of the main contentious mines in NSW (from a community or environmental perspective). Were all of these mines also approved as being of acceptable air quality impacts?

Particularly with the evolving community/health issues we are coming to recognize in the Hunter region, this does make one wonder about the merits of the methodologies used in these reports. We have consultants (paid by the mining companies) that provide modeling-based reports suggesting that impacts will be acceptable. However these consultants and their reports are far removed when the evolving health issues of the affected communities begin to arise?

That is, I am concerned that these air quality models may be poorly predictive of long-term health impacts for local residents. One could look, for example, at all the previous air quality/ health reports provided by consultants for the Hunter region's mines — and then see how these compare with the health issues in this area that have now become apparent with later epidemiological research.

Perhaps, at base, it could be more informative to ask the consultants of Pacific Environment if they would like to live within a kilometre of an open-cut mine with daily blasting occurring?

Noise Impact Report (Bridges Acoustics)

The data sets show a mild reduction in Project Specific Noise Levels under the Contracted Project – **again reported for Year 2 only**. Counter intuitively, the noise impacts are modeled in most of the tables as being worse at night than during the day? If real, this is of particular concern for the amenity of local residents.

As the tables demonstrate, a significant percentage of the local residences will still be subjected to noise levels over the recommended guidelines.

Like the Air Quality Impact Report, the noise impacts for the other 19+ years of the project have not been altered in the revised Noise Impact Report.

General Comments

While Coalpac is at pains to have its project considered in isolation, it is naïve to consider that the outcome of this project will stand in isolation from the other proposed open cut mines in the vicinity. The whole area is being flagged as an open cut mining region near to Mt Piper Power Station. The problem remains that this mining area is also near to a number of population centres – that are already carrying excess health burdens.

There are other potential sources of coal – including ones within close proximity to the Lithgow power stations – that are of lower health and broader environmental impact. Given this, then on broad analysis we should use these other resources prior to any consideration of a large expansion of open cut mining in this region. Open cut mining in the Lithgow region is highly problematic because of:

- Local weather patterns (relating to local temperate inversions / confined valley air sheds etc)
- Health impacts for an already health disadvantaged community
- Broader local social amenity impacts
- Adverse environmental impacts
- Adverse impacts on other potential local industries

Conclusion

The Contracted Project of the Coalpac Consolidation Project has yielded modeling data that suggests reduced air quality and noise impacts for at least some residences in Year 2 of the project. However on closer inspection, many questions emerge relating to the reliability and comparative equivalence of the two data sets used between the Original and the Contracted Projects.

Importantly, no corrections were suggested for the original modeling for the other proposed 19 years of the project. It is thus highly contestable whether a possible reduction in health impacts for 1 out of the 20 years (even if valid) constitutes a significant reduction in the overall health impacts of this project.

I would thus suggest that the Contracted Project does not substantively alter the overall health impact of the project. Thus the concerns as raised by the PAC1 remain quite valid – and these revised air quality and noise reports would not seem to significantly mollify these.

Thus the Contracted Project, on the available data, retains a significant risk to negatively impact on the health of the local population – a population that already faces an excess health burden. This adverse health potential formed one of a number of reasons that lead the PAC1 to recommend refusal of consent for this project.

I would thus support the PAC2 to up-hold the PAC1's recommendation and reject the Coalpac Consolidation Project, entailing its current Contracted Project.

Dr Richard Stiles

References

- 1. Castleden W., Shearman D., Crisp G., Finch P.; "The mining and burning of coal: effects on health and the environment", MJA 2011; 195: 333–335
- 2. "Is Coal Mining Harming our Health?"; Report for Beyond Zero Emissions by The health and Sustainability Unit of the University of Sydney, 2012