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O/N H-1005526

**INDEPENDENT PLANNING COMMISSION**

**PUBLIC MEETING**

**RE: DARTBROOK COAL MINE- MODIFICATION 7**

**PANEL:**                                   **PROF ZADA LIPMAN**  
**ROSS CARTER**  
**PETER COCHRANE**

**ASSISTING PANEL:**                   **BRAD JAMES**  
**TROY DEIGHTON**

**LOCATION:**                               **UPPER HUNTER CONSERVATORIUM OF MUSIC**  
**BROOK STREET**  
**MUSWELLBROOK, NEW SOUTH WALES**

**DATE:**                                   **9.59 AM, TUESDAY, 9 APRIL 2019**

- PROF Z. LIPMAN: Right. I think we can begin now. Good morning and welcome. Before we start our meeting, I would like to acknowledge the traditional owners of the land on which we meet, the Wanaruah and Kamilaroi peoples, and pay my respect to their elders, past and present, and to the elders from any other communities who may be here today. Welcome to the public meeting on the proposed modification from AQC Dartbrook Management Proprietary Limited, the proponent, who are seeking to modify its development consent for the Dartbrook underground mine.
- 10 My name is Zada Lipman. I'm the chair of this IPC panel, which has been appointed to determine this proposal. Joining me are my fellow commissioners: on my left, Ross Carter; on my right, Peter Cochrane. And, across at the other table, the other attendees are Brad James and – Troy is actually sitting in the front row. Both of those are from the Independent Planning Commission Secretariat. Before I continue,
- 15 I should state all appointed commissioners must make an annual declaration of interest identifying potential conflicts with their appointed role. For the record, we are unaware of any conflicts in relation to our determination of this development application.
- 20 You can find information on the way we manage conflicts of interest and potential conflicts in our policy paper on this matter, which is available on the Commission website. In the interests of open transparency and full capture of information, today's meeting is being recorded, and a full transcript will be produced and placed on the Commission's website. The public meeting gives us the opportunity to hear your views on the assessment report prepared by the Department of Planning and Environment before we determine the modification.
- 25
- Now, just looking at our role in the determination, the Independent Planning Commission of New South Wales was established by the New South Wales Government on 1 March 2018 as an independent statutory body operating separately to the Department of Planning and Environment. The Commission plays an important role in strengthening transparency and independence in the decision-making processes for major development and land use planning in New South Wales. The key functions of the Commission include to determine State significant development applications, conduct public hearings for development applications and other matters, provide independent expert advice on any other planning and development matter when requested by the Minister for Planning or the Planning Secretary.
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- 35
- 40 The Commission is an independent consent authority for State significant development applications and provides an independent additional level of scrutiny where there are more than 25 public objections, reportable political donations or objections by relevant local councils. The Commission is not involved in the department's assessment report on the project or any findings within it. Now, just to look at where we are in the process at this stage, this meeting is one part of our
- 45

decision-making process. We have also been briefed by the proponent and by the department, and transcripts of these meetings are already on the IPCN website.

5 After today's meeting, we may convene with relevant stakeholders if clarification or additional information is required on matters raised. Records of all meetings will be included in our determination and placed on our website. A site inspection took place yesterday at the project site. The proponent, the Independent Planning Commission and representatives from the Hunter Thoroughbred Breeders Association and the Hunter Communities Network attending the site inspection. A  
10 summary of any questions asked and answered has been recorded manually and will be placed on the Commission's website.

The Commission received a number of written comments in relation to the Dartbrook Coal Mine modification, which the commissioners have reviewed. These written  
15 comments will be made available on our website. The Commissioners have also reviewed the written submissions received by the Department of Planning and Environment, which are published on the department's website. The Commission will continue to accept written comments about the project until 5 pm on 16 April 2019. Anyone can send written comments to the Commission before that time.

20 You can do so by sending your comments to the Commission by email at [ipcn@ipcn.nsw.gov.au](mailto:ipcn@ipcn.nsw.gov.au) or by post to the Independent Planning Commission New South Wales, Level 3, 201 Elizabeth Street, Sydney, New South Wales 2000. Following today's meeting we will endeavour to determine the modification as soon  
25 as possible. However, there may be delays if we find need for additional information. Now, I just want to talk about the ground rules today before we hear from our first registered speaker, and we expect everyone to follow those. The hearing today is not a debate.

30 We will not take questions from the floor and we will not permit interjections. Our aim is to provide the maximum opportunity for people to speak and be heard by the Commission. We ask that the speakers today refrain from making offensive, threatening or defamatory comments, as per our guidelines available on our website. Many people find public speaking difficult. Though you may not agree with  
35 everything you hear today, each speaker has the right to be treated with respect and heard in silence. Today's focus is public consultation. Our panel is here to listen; not to comment. We may ask questions or seek clarification, but generally this is unnecessary.

40 It would be most beneficial if your presentation is focussed on the issues of concern to you. It is important that everyone registered to speak receives a fair share of time. Now, we will have to very strictly enforce time-keeping rules today, because we have a large number of speakers and we want to ensure that everyone has their allotted time. As chair, I reserve the right to allow additional time if I consider it  
45 appropriate, but I think it is highly unlikely on the tight schedule we're on today. A warning bell will sound one minute before the speaker's allotted time is up and again when it runs out. Please respect these time limits.

Though we will strive to stick to our schedule today, speakers sometimes don't show up or sometimes decide not to speak. If you know someone will not be attending and has registered to speak, please advise either Brad James or Troy Deighton. If you would like to project something onto the screen, please give it to Brad James before  
5 your presentation. If you have a copy of your presentation, it would be appreciated if you would provide a copy to the Secretariat after you speak. Please note any information given to us may be made public. The Commission's privacy statement governs our approach to your information.

10 If you would like a copy of our statement, you can obtain one from the Secretariat or from our website. I would like to inform everyone here today that, in accordance with the Commission's guidelines, no alcohol is permitted to be brought onto this venue and anyone who does so will be asked to leave the venue. Finally, I would ask that everyone present please turn off their mobile phones or turn them to silent.  
15 Thank you. I will now call our first speaker, who is John Robinson.

MR J. ROBINSON: I assume I'm speaking just here?

20 PROF LIPMAN: Yes – yes. Just there. Thank you.

MR ROBINSON: Thank you, Zada. Thank you, Peter. Thank you, Ross. Welcome to all of those who have taken the time to attend to those public meeting. My name is John Robinson. I am the CEO of Australian Pacific Coal, the owner of the Dartbrook Coal Mine. Over the past 13 months, AQC has worked diligently on  
25 its application to modify its existing underground consent for the Dartbrook Underground Coal Mine. From our environmental assessment work streams and response to submissions received in relation to the assessment, I was pleased that in January the Department of Planning recommended to the Independent Planning Commission that the underground modification is approvable, given the acceptable  
30 environmental impacts and net benefits to the wider community.

Based on submissions received through the Dartbrook administration building, I am aware that there is approximately 500 positive submission for the Dartbrook Underground Modification. MOD 7 is a low-impact, low-capital development  
35 method to get Dartbrook back into operation. Let me restate that the modification before the IPC today is for underground mining. There are a few key facts to note about the Dartbrook Underground Mine Modification: one, the modification 7 will rejuvenate a former operating mine to provide employment, direct and indirect benefits to the community; two, the Dartbrook Coal Mine has significant critical  
40 mining infrastructure in place. All planned operations will take place on land owned by AQC. The department in their summary report concluded that the impacts of the development can be managed to achieve acceptable level of environmental performance and the people is approvable. Thank you.

45 PROF LIPMAN: Thank you, John. Our next speaker is counsellor Kiwa Fisher.

MR K. FISHER: Commissioners, thank you for your time yesterday and the opportunity to address you again this morning. Again, I will outline council's general views on mining, specific concerns with this proposal and the department's assessment of it and reiterate our ongoing and fundamental opposition to the recommencement of any form of coalmining at Dartbrook. Firstly, council's position statement on coal and coal seam gas: a form of this no mining policy has been advocated by every Shire president and mayor since the election of Barry Rose in 1990. The current version was adopted unanimously in 2015. This position is consistent, considered, longstanding and community-led.

Council rejects the department's assertion that we objected in principle. Our views are consistent with our community strategic plan, consistent with the State Government's Hunter Regional Plan and the preceding strategic regional land use plan. They are consistent with the Deputy Premier's Upper Hunter economic diversification plan, consistent with our own land use strategy which was DPE-endorsed and also with the BIC and PAC and IPC Rocky Hill determination reports. I would like to take the opportunity to reiterate our views on the assessment of cumulative impact. A cumulative impact assessment methodology was first promised by the department in 1987. It was promised again in the Strategic Regional Land Use Plan, with delivery by March 2013.

Many PAC reports have also called for this but it remains in the bureaucratic too-hard basket. We've consistently advocated for this methodology, indeed today is the sixth PAC or IPC where I've called for the release of that methodology. We remain concerned that these impacts have never been properly assessed and note that the cumulative impact management clause in the current consent, clause 11.1, has actually been deleted. On the Voluntary Planning Agreements, the DPE says it's a great outcome and we were really open to negotiating – renegotiating – not so. We entered into it reluctantly in the view that it was prudent good governance to do so and poor governance not to.

In total, the VPA contributions to council are \$110,000 per annum. That's 0.21 per cent of next year's \$51.9 million budget. We do not agree that the most affected communities of Kayuga and Aberdeen are adequately compensated by the VPA, nor that it is a primary economic justification for the mine. The resolution accepting the VPA noted that in no way it represented support for Dartbrook and this was made clear to both the proponent and the department. Yesterday we detailed our concerns about economics, air quality, emissions, safety, water, the coal conveyancing system, proponent and experience, concerns with the joint venture partner, the size of the rehabilitation bond, but today with time tight I will concentrate on air quality and emissions.

There have been 15 air quality alerts issued for Aberdeen since Mount Pleasant was approved in 2018, June; 11 alerts already in 2019. Air quality data shows the 50 microgram PM10 maximum concentration threshold was breached on 50 days at Aberdeen in the first quarter of this year alone. That's exceedances at some point on 56 per cent of days. Air quality in Aberdeen is already beyond the tipping point and

we reiterate that there is no safe level for either PM10 or 2.5. Indeed PM2.5 isn't monitored at Aberdeen and we believe it should be. Yesterday, we showed you graphs illustrating the dramatic increase in PM10 at Aberdeen since construction began at Mount Pleasant in November 2016. They reflect what is happening, unobscured by rolling 24-hour averages.

If you charted a smoker's air quality over 24 hours, you wouldn't get the full picture either, but we know it's those three-minute exceedances 20 times a day that do the damage. And we know that from the National Pollutant Inventory that mining accounts for 77.3 per cent of reported PPM10 emissions. So we do not share the department's opinion that the Mount Pleasant conditions are recent and are accurate. In fact, we have no confidence in the air quality modelling done by Mount Pleasant, nor in their consent conditions. Mount Pleasant has had a dramatic and detrimental effect on air quality and those exceedances are not being policed.

Now, crucially, the mining SEPPs non-discretionary development standards for PM10 – State development should not result in cumulative annual averages greater than 25 micrograms per cubic metre and that's for residences that are private dwellings. And we know from the OEH data that we're well over that in 2019 in Aberdeen, and we know that in 2018, we were over that at Muswellbrook where a recorded annual average of 27.2 micrograms, at that threshold of 25 at Muswellbrook Northwest and closing in on it at Aberdeen – 22.23 micrograms. The whole town of Muswellbrook was either at or over the non-discretionary standard in 2018 and 2019 is actually trending up. So not just private residences close to the mine – the whole town was at or beyond the level. Any further additions or unplanned exceedances to the already overloaded airshed cannot be justified.

Now, emissions. Scope 3 emissions – those from burning Dartbrook's coal – have not been considered. The mining SEPP clause 14.2 states:

*The consent authority must consider an assessment of the greenhouse gas emissions, including downstream emissions of the development.*

Without that requisite assessment being provided, the modification cannot be assessed and must therefore be refused. Scope 2 emissions generated by moving Dartbrook's coal from the train line out to port are not included in the economic point. We note that the DPE has benchmark greenhouse gas emissions against approved rather than care and maintenance. It has been approved to emit a level of greenhouse gas associated with a much higher level of production, said Mr Reed. But what is the allowable level of greenhouse gas emissions? Where is that mentioned in the original approval? Conditions haven't been contemporised for the simple reason that they don't actually exist.

The original approval was granted in 1991, a different era, before Kyoto in '97 and well before Paris in 2015. Community expectations regarding emissions have changed significantly, even since the later 2001 consent. The five-year extension sought means all scope 1, 2 and 3 emissions in that period are new emissions, so the

5 department is wrong to say that they are not a new impact, particularly when measured against the mine and care and maintenance and especially against the mine closed and rehabilitated in 2022. We have legal advice confirming the relevance of the Preston judgment and questioning the appropriateness of the DPEs inconsistent assessment.

10 The EA includes no assessment of greenhouse gas emissions nor any proposal to minimise, mitigate or offset those emissions. This is another issue where Justice Preston criticised the Rocky Hill proposal. When questioned on this by the commission at your meetings, the department launched into an extended obfuscation and the proponent said that they would investigate flaring. We believe flaring would be furphy and that Dartbrook has already tried this in 2005 and that that trial failed due to the quality of the gas emitted from underground operations.

15 So briefly on the department's assessment, we believe the inconsistency in which base case the department has assessed the proposal is a fundamental flaw. In each case, this favours the proponent over the community, emissions against approved, economics uniquely against care and maintenance. Our legal team has found no case law that supports this approach. Placing so many safety issues into the post-approval  
20 framework means those issues will not receive any scrutiny other than the department's and the Resources Regulator who has already expressed no specific concerns. We contend that with two joint venture partners, companies with zero operational mining experience, trying to recommence mining at arguably the most problematic mine in New South Wales makes this approach both dangerous and  
25 fundamentally unsound.

Indeed object H of the Act which addresses the health and safety of the built environment has been specifically omitted from the DPEs considerations. They do admit that they have not assessed the financial viability or profitability of AQC,  
30 despite company tax being paid in New South Wales being listed as a major economic benefit, larger even than royalties of this proposal and despite the department backgrounding yourselves, that the proposal is a short-term operation with a high value on some cash flow while it's developing its other proposal. That's a quote from Mr Reed again. That backgrounding we view as highly inappropriate.  
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This modification has to stand on its own merits. It is not your job to award the proponent a cashflow lifeline to finance its open-cut planning. It is the commission's job to assess the merits and where the benefits and disbenefits of the proposal before  
40 it. So very briefly, in conclusion, we've drawn our own line in the sand with our position statement. We ask that you respect it. We believe the economics of the mine do not stack up. Air quality is demonstrably beyond acceptable standards in Aberdeen and Muswellbrook. Emissions have not been assessed as required by clause 14.2 of the mining SEPP, nor against the wider necessity for emissions reduction, nor in the context of the Preston judgment.  
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The water impacts of the proposal are too risky and not well enough researched or defined to allow consent. Safety is a paramount issue that has been totally ignored

and simply not assessed and we're alarmed that the Resources Regulator has raised no specific concerns. We believe they are ignoring Dartbrook's documented history. The proponent has not demonstrated either the necessary experience nor financial ability to operate the mine. Indeed the commission is assessing a project the  
5 proponent admits they have not made an investment decision on with a joint venture partner who is yet to conclude their part of the deal, and that JV deal is now overdue. Commissioners, we urge you to reject this application.

10 PROF LIPMAN: Thank you, Kiwa. Our next speaker is Mike Kelly.

MR M. KELLY: Good morning, commissioners. Further to the Chamber of Commerce's submission to this commission on 25 March, the chamber wishes to restate its support for the proposed modification. In addition to the economic benefits clearly stated in the Economic Impact Assessment prepared by Gillespie  
15 Economics and in the DPE assessment report, we bring the following additional point to the commission's attention. The mine has a current legal approval to mine. The proposed modification is small-scale and subject to strict and updated conditions and consent. The proposal allows for the practical use of existing assets.

20 The DPE assessment report concludes the following:

*In relation to:*

- 25 (1) *air quality – that with the addition of revised and more stringent conditions, the department considers that the air quality impacts of the modification could be appropriately managed and would not significantly change from those already approved;*
- 30 (2) *on noise – that with the addition of revised and more stringent conditions the department considers that the operational noise impacts of the modification could be appropriately managed and that the limited increases over existing approved levels will be negligible;*
- 35 (3) *subsidence – the department considers that the proposed development would result in significant reductions in approved subsidence and therefore greatly reduce subsidence impacts and environmental consequences;*
- 40 (4) *groundwater – that the department considers that the proposed modification will result in substantially reduced groundwater usage and drawdown than already approved;*
- 45 (5) *surface water and flooding – the modification is unlikely to result in additional surface water impacts or necessitate changes to the existing water management system;*



(6) *social – the department notes that due to the long-term period of inactivity at Dartbrook and recommencement of mining operations regardless of the modification would lead to social impacts.*

5 The DPE assessment report goes on to support the recommended additional conditions “to minimise the negative social impacts and maximise the local benefits of the mine”:

10 (7) *economic – the cost-benefit and local effects analyses demonstrate that the modification would provide net benefits at both the State and local scale and department considers that the most affected communities of Kayuga and Aberdeen will be compensated by way of direct mitigation or acquisition by AQC or indirect community enhancement funding through the VPAs with Muswellbrook and other*  
15 *Hunter Shire councils.*

The chamber agrees with the DPEs evaluation which states that:

20 *The modification’s benefits would outweigh its costs and the modification would improve the overall viability of the mine and enable underground mining operations to recommence thereby allowing its social and economic benefits to be realised.*

25 In conclusion, the chamber believes the approval of this modification will be an indication to investors that the approvals process is fair and balanced. It is critical that the economic benefits flowing from the coal industry be maximised as the global economy transitions over the next three or four decades. An approval of this modification can support investor confidence in the Upper Hunter and encourage  
30 investors in all types of industries that legally compliant developments in our region have a future. We thank the commission for this opportunity to present on behalf of Muswellbrook businesses and we look forward to a favourable determination. Thank you.

35 PROF LIPMAN: Thank you, Mike. David Burgess.

MR D. BURGESS: Thanks for the opportunity to present here today. The Lock the Gate Alliance’s concerns about this project extend to what is essentially the reopening of an old mine but, in a way, a new coal project taking coal mining to its northernmost extent in the Hunter Valley; the proponent’s stated intention to both  
40 the Australian Stock Exchange and the Aberdeen community to progress from underground to open-cut mining in the near future; the poor prospects of adequate rehabilitation in the light of recent statements by the proponent; the contribution that mining – a projected 370 megatons of coal will make towards climate change; the environmental impacts upon the Hunter River and its environs and social impacts  
45 upon the local community and businesses, in particular thoroughbred breeding combined with the cumulative impacts from the existing industry in the Upper Hunter.

We note that the environmental impact statement upon which this modification is based was prepared in 1999 and granted approval in 2001 at a time when the scale of giant pits such as Mount Arthur, Mangoola, Bengalla, Mount Pleasant and Muswellbrook open-cut had barely been proposed and/or imagined. This leads to a genuine fear that the assessment of cumulative environmental and social impacts completed in the last century are now somewhat out of date and inadequate. The Upper Hunter is now dealing with substantially different scenarios in terms of dust issues, supply chain movements, traffic and water allocations. The Department of Planning states that the modification is straightforward in scope but complicated by the fact that Dartbrook has been in care and maintenance for over a decade.

Notwithstanding the inactivity of the mine and its previous safety record, we feel that there are a few further complications than this. For some, if not all the time, the mine has been in care and – care and maintenance. 156 megalitres of alluvial water has been leaking into a tunnel in the old workings. While claiming the rate of seepage won't change as a result of the modification, the proponent also acknowledges that it doesn't know whether the proposed shaft into this part of the mine is within the Hunter River alluvium and would exacerbate the situation. The loss of more alluvium water is concerning in a region identified by the Federal Government in 2018 as vulnerable to hydrological change due to the impacts of mining.

Much more work needs to be undertaken by the proponent to determine if this is the case and before a decision is made regarding the application. The proposal does not include an adequate or contemporary assessment of cumulative impacts regarding potential hydrological changes due to mining in the vicinity of the Hunter River. It relies upon a model developed in the 1990s and findings published in 2000. Much has changed since then, most notably the dramatic increase in mining throughout the region. We are also concerned that raw water for Muswellbrook's town supply is drawn from the Hunter River not far downstream of the mine. The proponent fails to address the concerns of local government and residents regarding impacts on the quality and quantity of in-stream water.

While bord and pillar mining is assumed and generally acknowledged to be less impactful than the previous longwall methods, the proposal is deficient in its assessing the subsidence impacts or damage to longwall voids left by the previous operator and how this will interact with new panels. In essence this is really a new mine seeking to extend the old mine's approval. We submit that the entire proposal should be the subject of a new assessment and the extent of open-cut plans in the near future be included in that assessment. The proposal generally doesn't consider the impacts of the mine beyond the boundaries of the mine site itself, particularly in the area of transporting unwashed coal by truck and by rail down the valley to the Port of Newcastle.

Dust levels in the Upper Hunter frequently exceed national standards and the cumulative impacts this is having on the local community's health and amenity is still poorly understood. The concern felt within the community here was expressed

less than a month ago when this very room was filled with local people expressing their feelings at a forum on the issue. Additional movements of nearly 1000 B-double trucks per week on unsealed roads will also have a major impact on pollution and noise levels in close proximity to Aberdeen.

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The proponent acknowledges that a large number of surrounding properties will be impacted by noise and dust issues but, if one takes the example of property ownership near the existing mines that surround Muswellbrook and the number of places that are now owned by the companies themselves, it's easy to see that living in proximity to a coal mine is often unbearable and the predicted impacts are often understated. It is disingenuous for the company to imply that air quality monitoring in regard to Aberdeen identifies non-mining activities as being more responsible for PM2.5 concentrations than mining activities.

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Coal mining is not established around the town as it is around the likes of Muswellbrook and Singleton and the proportionality of responsibility for poor air quality would change dramatically should mining gain a foothold north of where it is currently taking place. In light of the local amenity and climate change, the recent Rocky Hill decision should be examined in detail with regard to the project that's before us now. Gloucester and Aberdeen have a number of similarities in the sense that large scale coal mining does not surround the towns and mines. Mines within hundreds of metres of the towns would impact upon them dramatically.

20

We ask that the commission considers this proposal along with its clear intention to expand into a big open-cut mine in the light of the mining industry attempting to push further up the Hunter Valley. While the five year extension proposes the extraction of 1.5 megatons per annum, APC is publicly pushing for a far larger open-cut project envisaging the mining and burning of 370 megatons. Approval of this mine would be yet another step in the wrong direction for the Hunter region and to New South Wales to meet the targets set under the Paris Agreement. Criticisms were made of the environmental assessment that it significantly underestimates the levels of fugitive emissions during the 12 years that Dartbrook was under care and maintenance.

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The mine has a history over nearly two decades of being at the high end of gassy mines and does not respond adequately to these concerns in its response to submissions. Dartbrook is one of 14 new and expanding coal projects in New South Wales that, if approved, Lock the Gate has identified as having the potential to produce more coal and greenhouse gas pollution than the proposed Queensland Adani mine. In this case it is the more sensitive Hunter Valley farmland that would have to make way for coal. With 90 per cent of the coal mined in the Hunter going to export and the IEA sustainable development scenario has global thermal coal consumption dropping by more than half over the next 20 years, the push of coal further up the Hunter Valley and the promise of expansion is unnecessary at this time.

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In recent times we have worked closely with the New South Wales Wine and Thoroughbred industries in seeking to resolve land use conflict. The strategic rural land use plan for the Upper Hunter resolved under the O'Farrell government in 2012 to avoid land critical to the equine and viticulture industries promises protections  
5 never before seen in New South Wales and heightened protection. However, the situation remains uninvolved and it is now the community of Aberdeen who are feeling the heat of ongoing land use conflict. A balanced and less conflict-ridden approach would be to make regulation that prevents development.

10 Every single one of the exploration licences that affect industry – affect industry – identified critical industry clusters is in the Hunter – in the Hunter is due for renewal in this term of government. In the meantime, however, it is upon the panel to decide on Dartbrook whose lease overlaps 153 hectares of land identified as critical. Lock  
15 the Gate Alliance believes – sorry, I will go again. The predicted decline in thermal coal demand as countries take steps to implement Paris Agreements will have consequences for the Hunter Valley. Entities such as the Port of Newcastle, Singleton and Muswellbrook Councils and AGL are looking to prepare for this.

20 We believe that the operation challenges posed by the reopening of this notorious coal mine with a high end combustibility risk and by a second tier operator will put the wellbeing of the local community at risk and is an unacceptable incursion into productive land. It will contribute significantly towards a worsening air quality situation in the Hunter Valley. Thank you.

25 PROF LIPMAN: Thank you, David. Tony Lonergan.

MR T. LONERGAN: Good morning, Commissioners, and thank you for the opportunity to speak today. I'm a local landowner whose property is adjacent to the Dartbrook underground mine. The workings in the Kayuga seam prior to the closure  
30 of the mine in 2006 were beneath land owned by my parents at the time. I'm therefore in a position to present some of the operational history of the original mine. I feel this knowledge is particularly important in relation to the gas issues. The mine originally operated in the Wynn seam. The inflow of water in the Hunter Tunnel was a major issue and the large amount of gas in the Wynn seam compounded this  
35 problem.

Low permeability in the seam meant that the gas had to be extracted between the longwall panels before the coal was extracted and it was then vented to the surface. I was told by a mining – this was not under my land by the way – I was told by mining  
40 engineers at the time that this gas was 85 per cent carbon dioxide and 15 per cent methane and, therefore, not combustible, but very large volumes of gas were emitted. Mining in the Wynn seam was deemed uneconomical and then the owners – and the then owners, Anglo Coal, decided to move operations into the Kayuga seam. Surface infrastructure for the Kayuga operations were on my parents' land. This  
45 included an air deoxygenation plant and service gas pipelines for pumping oxygenated – oxygen-depleted air through the goaf to prevent spontaneous combustion.

I was informed by Anglo engineers that the gas contained sufficient methane for combustion and, as a consequence, my family made a condition opposing the surface infrastructure that the methane not be vented to the atmosphere. Anglo negotiated with Energy Australia to move portable generators onto the site to produce electricity for the grid. The initial assessment was that there was sufficient gas for 11 megawatts of generating capacity. This did not eventuate, because, while there was abundant gas on the western end of the longwall panels, it declined towards the east. So, even though there was more gas in the panels further south, Energy Australia declined to be involved.

My family and I then asked that the fugitive methane be flared to reduce its greenhouse impact. Anglo agreed and the equipment was assembled. However, the engineering problems that resulted in the spontaneous combustion in the goaf eventuated and ultimately led to the closure of the mine. In conclusion, there's a lot of gas in the Kayuga seam. This is obvious from the 94,000 tonnes of CO<sub>2</sub> equivalent released to the atmosphere during the 2017/18 greenhouse reporting period. Fugitive emissions have been significant and continuous since the mine closed in 2006.

In relation to the long-term intention of Australian Pacific Coal regarding the open-cut mining at Dartbrook, I would like to add some comments. I'm a member of the CCC and we've been continuously told since APC bought Dartbrook that they intended to put an open-cut – to open cut the resource. Details of the mining method unique to the Hunter were given. The ..... strip ratios were quoted; numbers of people working on the study were given. In addition, in 2018, at least two landowners, who wish to remain anonymous at the moment, were approached with offers of contracts to purchase their land once an open-cut licence was granted – a non-refundable deposit was part of this deal – yet John Robinson Junior claimed at a public meeting in Aberdeen last Sunday in front of 100 people that there were absolutely no plans for an open-cut operation at Dartbrook. This modification has all the markings of a Trojan horse.

PROF LIPMAN: Thank you, Tony Butch Smith.

MR B. SMITH: Hello. My name is Butch Smith. We actually met yesterday at the dairy farm. And probably I'm here to speak from more of a practical rather than a technical point. We actually lease land from Australian Pacific Coal. We've been dairying there since 2000 under the previous owners and, in that time – I know it has been closed down of recent times, but during that time, we never had any issues with milk quality, with pasture quality, cattle still went in calf. So, from a practical point of view, we haven't seen any issues that can't be dealt with.

And just of recent times with the purchase of the mine by Australian Pacific Coal, they showed their commitment to the continuation of the dairy in the way of a new dairy structure – new dairy building, which will allow us to increase production and maintain the viability of the dairy industry, which has certainly been in troubled times of recent years. So – yes – so I would like to just point out that, from a

practical point of view – we surround the mine – that there hasn't been any issues during the period when it was opened; that we found an issue – that we could have walked away if it was an issue, so I would have done that. So we're still there and that's just the practical explanation of where we think mining and farming and how it can coexist if you choose to go that way. Thank you.

PROF LIPMAN: Thank you, Butch. Grantly Blake, please.

MR G. BLAKE: Good morning, Commissioners. Thank you for the opportunity to address you this morning. I'm a bit like Butch, which I'm a genuine farmer. Been doing it a fair bit longer than he has. I'm on the Denman Road, 18 ks out, surrounded by coal mines. They're everywhere. I live in the middle of a coal mine, so I can tell you a fair bit about coal mines. Let's introduce the family to start with. We came there in 1908, so we've been there an awful long time. I'm one of the oldest residents in the district. I'm the fourth generation farming; I'm looking 80 in the eye now; the fifth generation is working on the farm; the sixth generation is living on the farm, 11 of them.

Mine development up here. The initial preparation for the mine to operate was one – my brother-in-law was one of the bosses; stayed at our place. He'd come home every night – he had done nothing else with his life except underground mine ..... they know nothing about open cuts, they're underground – “Most dangerous mine I have ever worked in.” If you weren't getting pulled out by gas, you were getting pulled out by water. Go back to work, out, water, day-in-day-out. Now, from that consequences, the Hunter River become a septic drain to the ocean. The Hunter River has been destroyed by Dartbrook. There was no other mines around.

We used to have the – there was 11 dairies on the Piercefield and about eight or 10 on Eden Lassie. All drank the water; the water was tapped right through the house and everything. Now you wouldn't even shower in it, let alone drink it. So it become a septic tank. Then we move on and talk about why I say it has been a septic tank. There's no fish in the river; there's no platypus in the river. Where have they all gone? They've been poisoned. And us being human beings living on the river, we're having the same result and a little bit more later on. Fish breeding grounds. Now, what a joke. You've got Bengalla there trying to breed fish in the Hunter River. I'm the only registered fish farmer in the valley, so I know a little bit about fish and I know a little bit about water quality.

They're throwing logs in to breed fish in the river. What fish are in the river? European carp – European carp. There's no mullet, there's no bass. Breeding fish grounds – bass. Right? They must go back to salt water to breed, so what are you putting logs in the river here for? And the other one that makes a fool of them, catfish. They build their own nest, like a chook, and lay in it. They don't need you to build a nest. So there's no fish in the river except European carp. Employment. And this one really – really makes me laugh, from this coal mine: employment. Locals now come from Narrabri. That's a statement from Mr Robinson. Newcastle.

Narrabri is halfway to Brisbane. Got nothing to do with local employment. Human health. Okay.

5 There's three adults with – asthmatics. There's seven kids that all have respiratory tract infections, androids removed, tonsils removed, ear infections, ear operations. Five year old girl never been off antibiotics. I'm sort of getting old, I guess, but I'm getting sick too. You go to a specialist. If you want to improve your health, move out of the Hunter Valley. Get away from the coal mines. And if you want any documentation I will – I will get it all for you. I'm not up here telling lies. Air  
10 quality – off the face of the earth. Today, it's exceeding – on the wireless, coming in, exceeding right today. Doctors. Thank God. The doctors are starting to get involved.

15 They've been quiet for a long time, but the doctors are now telling about human health – human health. Okay. Well, let's start taking notice of it. Dealing with coal mines. You try it. You try dealing with a coal mine. It's impossible. And I will give you a classic example, out there. I won't mention the name unless you want me to. You are severely affected by our operation. We will put air conditioning in your house. Okay. They get the local buddies, which they pay, so they go and get the  
20 right results they want. We would love to put air conditioning on your house, but you are presently 400 per cent overloaded on your power. So I panicked. Rushed in to ..... to book my power supply.

25 Said, "I want to talk to Energy Australia." Energy Australia didn't even exist, so that's how much I talk to them. Had to talk to Ausgrid. And I told him. He said, "You've been talking to a certain mine, haven't you?" That's their tactic. So we're 400 per cent, come back. "Sorry, We would love to do it, but you're 400 per cent overloaded so we can't do it." We can't drink our water off the roof. We have to buy all our water. 150 bucks a month. Ask the coal mines to reimburse you. "Yes.  
30 Go and get nicked." All right. Let's move on. I've got – I've just got notes, so I'm not the greatest of public speakers. Farming. You can never go from here. Go from Muswellbrook to Denman.

35 I'm the – I'm one – one – I'm the second genuine farmer on the Denman Road, and I used to be the 32<sup>nd</sup> dairy farm. There was 40 dairy farms between Muswellbrook to Denman, and there is now one and it's tentative. They're not making any money. There's one dairy farm, and I was 32. The rest is owned by, mostly, BHP. Sterilised. Lease it out to hobby farmers, which are coal miners trying to right down their tax. Okay. The horse industry. I'm – I'm a sort of a bit of an advocate for the  
40 horse industry. Let's have a look. We've got a packed audience. What's going to happen on Saturday? One horse is going to have 40,000 people at it. And the coal mine is trying to wipe out the horse industry.

45 Winks is running. It's going to have 40,000 people at the race, for one horse. And here we've got a coal mine we're trying to – I don't know what you're trying to do with it. The power industry. Now, I know a bit about this because I've got a Chinese mate who used to be an operator down there. They have – they burnt crap

coal at the – at Bayswater or Liddell. 40 per cent ash. No wonder we've got plenty of gas and stuff in the atmosphere. Taxation. Coal mines have got a great reputation, haven't they? The tax man is always chasing them, shelf companies over there, something somewhere else. The two big ones have just been done, thank God.  
5 EPA. Useless. Ring them up and tell them that you can't see on the Denman Road. "Blah, blah, blah. Yes, well, we're in Newcastle." We don't even have an EPA here.

10 New coal mines not needed. You can stop new coal mines right now. How about – let's talk about wind and solar. I'm solar sufficient in power now, and I don't use a generator. I could be connected – disconnected off the grid. Cost me 40,000 bucks. They had five blackouts this month. Didn't even know it happened. So there are alternatives to coal. And I always just wonder about this one: corruption. Now, if  
15 this man here give you a few bob today, that would be corruption. But the people mostly in favour of this mine will financially benefit from it. It's a thin line, I think – it's a thin line. And, just to rub salt into the wound, what's the school kids doing? I think they've got more brains than we have. They're out there protesting now about their futures, and here we are trying to approve a coal mine. Thank you.

20 PROF LIPMAN: Thank you, Grantly. Our next speaker is Scott Franks.

MR .....: I understand Mr Franks is not available today because he is a witness in the Family Court .....

25 PROF LIPMAN: Right. So he's not coming. Right. Thank you. All right. Len Kelman.

MR L. KELMAN: Thank you, Commissioner. I would like to begin with  
30 honouring and acknowledging the traditional owners of this land on which we speak today and would like to respect our elders, past, present and future. I want to introduce myself as a local born and bred in the Merriwa area, and have worked in the coal industry and carted coal around the region since 1973. I'm honoured to be the Muswellbrook Citizen of the Year. I've noticed a list of people of unfamiliar  
35 faces that will leave after the meeting and a lot of familiar faces that have benefited from the coal mining industry in this region. My main interest is the potential employment and opportunity that could be there not only for the mine workers directly employed, but by the operation – but the downstream employment that will bring with it the local community throughout the entire coal chain.

40 Opportunities for local businesses, and government and coffers; economical benefits not only locally, but State and Federal levels. The Australian economy is in the position as it is now because of the cost of mining. I speak for the local people and ask that this application be treated on an individual merit and not as an overall view  
45 to mining. The application on its own merits has very minimal impact compared to a new mine, as it – I'm not a very good reader, but anyway – already exists in care and maintenance. The changes to mining from longwall to bore and pillar will have no detrimental effect to the surface.



Mining impact not only allows the opportunity to provide – mining has not only allowed me the opportunity to provide for my family and for others; you may have seen recently in the media that I have supported – and been supported by a local business, as well as being – taking time out myself to deliver much needed water, and hay and food supplied daily to those affected by the drought. The economic benefits from mining has allowed myself and the local businesses to help our farming mates. Dartbrook has proven that it can coexist with the farming and grazing. It would be silly of us not to support the application and to reject the application, as the project is already established, and in a care and maintenance, and its return to production can help contribute to our whole community once again.

The fact that I would like to point out that Drayton – with the closure of Drayton, already four hotels have closed down and it looks like Big W here may be next. I would also like to make the point that in a few years, two other mines closing down, Muswellbrook Coal and Liddell that have exhausted their resources, and the power station which will have a huge impact on the local businesses and community of this area. Thank you.

PROF LIPMAN: Thank you, Len. Next speaker is James Whelan.

DR J. WHELAN: Thank you, Commissioners, for your patience and for the opportunity to address you today. My name is Dr James Whelan and I'm an air pollution researcher with Environmental Justice Australia. We're a national public interest organisation. I've been actively involved in researching and public interest advocacy around air pollution for approximately 25 years. I would like to start by acknowledging the traditional owners of the country that we're meeting on and pay my respects to their elders, past, present and future. I will restrict my comments today to concerns about the air pollution in the Hunter Valley, and the potential for this proposed reopening of Dartbrook and the potential open cut that might follow on air pollution.

I want to start by noting, if I could, in my written submission, that the assessment report took me by surprise, because it focused almost exclusively on PM2.5. PM2.5 or fine particle pollution is typically a product of combustion processes. The particle fraction that I expected to see as the focus for the assessment is PM.10, the larger particles, or coarse particle pollution, which is generally the result of mechanical processes in the Hunter Valley. Coal mining is responsible for approximately 90 per cent of the coarse particle pollution, whereas fine particle pollution comes from a range of sources, including the power stations, of course, and wood heating.

I will watch the time closely. I would like to show a few graphs, if I could. We wouldn't normally – we wouldn't ordinarily be here – I wouldn't ordinarily be here. I have previously addressed the Planning Commission perhaps 14 or 15 times on air pollution from coal mines. I stopped coming, because it appeared that there was not scope for the Planning Commission to take air pollution into account. I didn't see in the assessment reports any evidence that that was being taken into account. It certainly didn't serve as the basis for any determinations written by the Planning

Assessment Commission. I'm here at the behest of several community members and groups to present evidence and contrary to my instinct.

5 The Hunter Valley has, as we've heard today, quite an extensive air pollution monitoring network. There are 14 or 15 monitoring stations in the valley and the access to that data is excellent. In fact, it has also been noted many of us have received, I think, eight air pollution alerts from the Hunter Valley monitoring network in the last 24 hours indicating moments where the 24 – rolling 24-hour average coarse particle pollution level went over the national standard. This is one of  
10 the most compromised, one of the most burdened, air sheds – air environments in the country and certainly a place where there's the strongest case available to reject a proposal that would worsen that problem.

15 The New South Wales Government, along with the other eight Australian Governments, State, Territory and Commonwealth, have endorsed air pollution standards, including particle pollution standards which will be the focus of my evidence today. Those standards are exceeded both for fine particle pollution, which was the focus of the assessment report, and for coarse particle pollution. In fact, the Commissioners will be familiar with the assessment report which shows that fine  
20 particle concentrations are expected to exceed 10 micrograms per cubic metre over an annual average where the national standard, endorsed by the New South Wales Government, is eight micrograms per cubic metre for long-term exposure to fine particles – respirable particles – and that's a standard which will become stricter in 10 years' time – sorry – less than 10 years time: by 2025.

25 Our government, the New South Wales Government has committed to an annual average of less than seven micrograms per cubic metre for fine particular pollution, for PM2.5. Here in the valley, most of the monitoring stations are registering over nine or 10 micrograms per cubic metre every year since monitoring began in the  
30 valley. But, as I said, I will focus on coarse particle pollution. It's my assessment that the coal mine extension will increase coarse particle pollution concentrations both locally and regionally.

35 This is actually acknowledged in the Mod 7 assessment report. Coal dust is generated at every stage in the coal mining process from pit to port, and, although the initial proposal is from underground coal mining, it will nonetheless contribute fine particle pollution and coarse particle pollution from diesel vehicles, from the coal trains, from the trucks, coarse particle pollution from loading, unloading, the  
40 uncovered coal wagons, the uncovered coal trucks from wheel-generated dust, from any number of different processes that are anticipated, that are essential in mining and exporting coal.

45 The New South Wales Government has access to an excellent guide commissioned in 2011 by the New South Wales EPA and commissioned by – undertaken, sorry, by Katestone Environmental, the consultants, on best practice measures to minimise or prevent emissions of particle pollution from coal mining, and I would like to note that I see no evidence of commitment to that wide range, that huge toolkit of

measures. In fact, I have not seen the menu of options to control coal dust evident in the commitments made by any of the coal mining companies in the Hunter Valley in, as I said, the course of presenting to 14 or 15 hearings like today's.

5 There are programs in place. The New South Wales EPA is very committed to the Dust Stop program which has failed. The Dust Stop program is intended to reduce wheel-generated dust and other pathways of coal dust from the coal mining industry, but the National Pollutant Inventory and the Ambient Air Monitoring Network – all the available evidence would indicate that, despite the EPAs best efforts, in fact,  
10 particle pollution concentrations have increased dramatically and steadily.

In fact, coal mining PM10 emissions trebled in 10 years according to the National Pollutant Inventory, trebled despite the state EPAs apparent efforts. There is no threshold below which particle pollution doesn't contribute to cardiovascular and  
15 respiratory ailments. There's a linear relationship between concentrations of particle pollution and a range of respiratory and cardiovascular ailments. I'm not a medical doctor. I'm a researcher, but that evidence is irrefutable and globally accepted. That's a consensus.

20 There are health benefits to bringing down particle pollution at any concentration. The Climate and Health Alliance undertook an assessment of the health impacts of particle pollution in this valley. They drew the conclusion that here there's a health burden, approximately \$47 million in Singleton and \$18.3 million each year here in Muswellbrook, and I want to note that the Climate and Health Alliance of health  
25 professionals undertook that assessment because in two decades of advocacy the community here in the Hunter have been unable to have a cumulative health impact assessment undertaken by the New South Wales Government.

It's my opinion that any approvals of a proposal like Dartbrook should be subject to  
30 that kind of health impact assessment which hasn't been undertaken. I would like to show four graphs, if I could. They're going to be a little big to show on the screen here, I think, but if I could, the first is looking at annual average PM10 concentrations. The point of this graph – and each of these bars, if I just scroll down, indicate years where the top bar in each instance is the most recent year, 2018.  
35 During 2018 the annual average standard, which is 25 micrograms per cubic metre, was exceeded at Muswellbrook ..... Camberwell, and you will note that Camberwell exceeds that annual average almost every year since monitoring again, Singleton north-west, Mount Thorley, Muswellbrook north-west. All of those locations had an annual average concentration of PM10 over the national standard.

40 The second graph is looking at the number of – the frequency with which the PM10 standard for 24-hour averages – this is daily averages – were exceeded through the Hunter Valley. This standard shouldn't be exceeded more than five times each year. That's a commitment that the New South Wales Government has made and is unable  
45 to keep, it would seem. At Warkworth the annual average standard was exceeded 15 times last year, at Mount Thorley 30 times, at Camberwell 42 times, but every one of the monitoring stations exceeded that standard on more than five occasions. The

third graph is looking at the highest concentrations of PM10 over 24 hour averages during 2018, and I will just scroll down to show the standard is 50 micrograms per cubic metre. Concentrations shouldn't exceed 50.

5 The highest standard in Muswellbrook north-west was 231.4 micrograms per cubic metre, but, as I've pointed out, there were frequent exceedances. These are simply the highest concentrations. My point being this is an airshed that needs very active measures by the New South Wales Government to control air pollution and reduce it. My fourth and final graph, if I could, is a quick analysis of the year-to-date figures.  
10 It has been already mentioned today that we've received alerts overnight. The year is shaping up to be quite a bad air pollution year, 2019, and the number of times we've seen exceedances of the PM10, the coarse particle pollution concentration is highest in Camberwell, but if I could point out, other than Merriwa, every one of the – and Singleton, every one of the monitoring stations has already had its annual quota – and  
15 worst case scenario of five exceedances. I encourage the commissioners to look at air pollution control very seriously and to move the department in that direction. Thank you for your time.

20 PROF LIPMAN: Our next speaker was to be Trevor Woods, but he's going to speak later in the afternoon. So Scott Norton is here. Perhaps we can proceed with your presentation.

MR NORTON: Good morning. Thank you for the opportunity to speak today. I'm a Scone landholder, resident and farm manager of Yarraman Park thoroughbred stud which is approximately eight kilometres upstream from the Dartbrook Mine on the Dartbrook Creek. Yarraman Park is approximately 1400 hectares running normally  
25 about 300 cattle and 330 horses, employing on average 24 people, many of whom live on farm, veterinary practitioners, farriers and many other contractors. We have a policy to support local businesses as much as possible and are proud of the  
30 contribution we make to the economy of the Upper Hunter. We often top the vendor averages at major sales and stand one of the two Australian sires. Mares come from all states of Australia to be served by him, and we are currently hosting mares from both the US and the UK that will return home to foal in the Northern Hemisphere.

35 We generate income of over \$25 million, so not really a boutique enterprise. My main concerns are the potential of increased air pollution generated by coal mining and the effects the mine will have on the Dartbrook alluvial aquifer. Yarraman Park is totally dependent on the aquifer for stock, domestic and irrigation water. During the current drought the available water has slowly been decreasing. A year ago we  
40 were irrigating at about 50 per cent, and for the past three months we have been unable to irrigate at all. Our stock and domestic bores pump from five metres lower than the irrigation pumps, and we have no idea how long this will last, but the water level is still dropping. I worked at Yarraman Park for the past eight years, and during this period we have spent over \$300,000 looking for alternate sources of  
45 water.

We are still looking, but at this stage we have been unsuccessful. The graph you've got is taken straight from the Water New South Wales website showing the water levels on a monitoring bore in the property Nandowra, our downstream neighbour and still seven kilometres from the Dartbrook Mine. It shows clearly a difference in water levels before and after the mine closed at the end of 2006 and the current drop in water levels due to the drought. I also have rainfall data from the Bureau of Meteorology that shows that this change cannot be explained by changes in rainfall. Clearly, an operating Dartbrook Mine influences the Dartbrook alluvial aquifer. I'm very concerned that with the predicted increase in severity and frequency of droughts, combined with the reopening of the Dartbrook Mine, will put Yarraman Park and other agricultural enterprises along the Dartbrook Creek at serious risk.

All of us in the district are affected by coal dust and other mine pollution. I only put down three metres, so a little bit longer – three minutes. We know what it is and where it comes from. We live with the worst air quality in New South Wales, yet no one outside the district seems to even know about it and, certainly, nothing has been done to control it. Occasionally, the EPA achieves a conviction and the company is fined, but the fines are so small that mining companies treat it as an operational expense; not a deterrent. Australian Pacific Coal recognises that air quality will be worse if the Dartbrook Mine reopens.

I've no issue with people earning a living from mining. It does upset me, though, when it is inferred that mining industry and mining jobs are more important than agriculture and those of us working in agriculture. I feel threatened when mining companies bring out that term "coexistence". Like, example of air quality, that means mining will continue uncontrolled and the community has to live with it. My job and the jobs of my colleagues are important to us. Please reject this proposal.

PROF LIPMAN: Thank you, Scott. Peter Haydon, please.

MR P. HAYDON: Thank you very much for the opportunity to present here today. I'm a long-term farmer and stud operator, and I live up at Blandford on the Hunter River there – sorry; on the Pages River in the Upper Hunter. Our stud, Haydon Horse Study, is one of the oldest continuous studs in Australia. We have the unique claim that we've been operating in the same family since – on the same property in the same family since 1832, so we've been there 187 years, which is a bit like a record. They were early pioneers in the area, and they selected our particular block there because of the beautiful water on the – on our Pages River. And that water, as we saw today, is the worst we have ever seen it.

There is no water between – on our river now right up to Blandford, Murrurundi. Even the villages and the town have been getting water carted there now, so it's a very dire situation.

I was involved in the Bickham Coal Mine project from day 1, and had various roles there including chairman of the Bickham Coal Mine Stakeholders Group. It's very interesting, because we actually made history when the State government stopped that coal mine from proceeding. It was on the recommendation of a Planning

Assessment Commission, and when they concluded that digging 400 metres down beside – only going out 100 metres – 400 – so you go 100 metres out from the river, 400 metres down, and they decided that that would put the river at risk, which it certainly would have done, and it would have had huge consequences for the whole valley and our up end of the valley where Scone’s – horse capital of Australia – and all those studs and everything would have been at serious risk.

I will just quickly show you this photo, which is one of the iconic ones from our battle. It shows you here, if you can read that, it says Scone. I will show the audience in a minute. But we actually held 500 horses – people on horseback gathered in Scone to show and demonstrate that we wanted to save Scone, horse capital of Australia, against coal mining. So that was the iconic cartoon that was put in the Sydney Morning Herald, and I dragged that off – off the wall today to bring down. So, sadly, for me, being here today is a bit like déjà vu. We’ve been there and done all this before. And, really, if the DPE had done their job properly, we would not be here today. We should not even be here today.

If they had worked on the principles that – that we had sort of developed when we were doing the Bickham, what we found was every time we brought up an issue, the company and the department would work together and they would resolve that issue. So – so we were wondering what was going in. So you’re here today as independent arbitrators, and that’s because of all the work we did on Bickham, because we asked for an independent body to come and assess it, because we were just seeing we were banging our heads against a brick wall because everything we did, the department was pro-mine. They worked with the company.

So that’s why we asked for that and that was – as I said, we made history. They actually took that on board. We actually got an independent body. We had the first pack, and we had a very similar meeting like this gathering at Scone. And, as I said, it’s history now, because they were brave enough to recommend to the State government not to go ahead with the Bickham Coal Mine. Now, again, this Dartbrook Mine should never, ever have been approved in the first place. If they had worked – decided that Bickham, going out – going down 400 metres, 100 metres, next to the river, was at risk, well, how did they ever allow for a coal mine activity to go under the Hunter River, under Dartbrook.

It actually is really beyond comprehension, really. We were shown, way back then, in the early days, water pouring down from above. And how the department did not foresee these problems – really, it’s simple common-sense, isn’t it? The law of gravity. Simple water flow. That just really just is beyond, as I said, comprehension. But, as I said before, we found that every time we brought up a problem with the Bickham, they worked with the department. And one of the ones I will highlight is, it was called “river capture”. So we researched, and there were a lot of examples around the world, that where, in this case, by going 400 metres down below the river, you actually can get river capture. Quite simple, really. The river is going to come down.

So what did they propose? They proposed a thing called a “grout curtain”. And this was a serious proposal. They put in in their thing. And we’re all aware of the grout we have in our showers, you know. Might waterproof the wall, but how – how was this ever going to sort of solve river capture? So, luckily, in our pack hearing – like  
5 what’s happening here today – they were three water experts and they totally threw that proposal out, which is where it should have been. So that was very good to do. We also became very disillusioned with the terms that were called “industry best practice” and this was one of them – grout curtain.

10 Well, you’ve only got to look around to see industry best practice in this valley is certainly not – not working. They’ve allowed this horrible air that we breathe today here. Now, when I hopped in my car this morning – I live up at Blandford; it’s only 40 minutes away – I looked at a beautiful, clear blue sky. As I drive down, I see this cloud just hanging over Muswellbrook here, and – and you three be careful when you  
15 go and get in your car, because you will see the dust on it just sitting there over – over in one day. It’s just horrible. And – and I am reliably told it’s perhaps even worse than Sydney. Who knows?

20 But, as I said, we really do notice it every time we drive down the valley here. And, of course, it has been backed up now with all these experts how bad the actual water is. There are other silly things that they’ve allowed too, and I would love you to have a look at this. There’s things like “final void”, so, when the coal mine finishes, they move on and they leave it all. So what we need is an audit done of the total Hunter Valley now to work out how many final voids there are going to be, who’s  
25 going to be responsible for that rehabilitation, and I think you will be totally horrified who’s going to then sort of clean up – clean up that mess. And if you fly over this valley you will just see what a lunar landscape it has become.

30 And the other thing I urge you to look at is – is – is the amount of water. Again, look at it as a global aspect in the Hunter Valley, how much water is being taken out. You’ve got to remove the water at a coal mine, because they’re full of water, so they’re taking out a lot more – lot more water than is even in the system. And, I tell you what, it’s heart wrenching for us in a dry time to ride our horse around in the high country up there now. I know it’s one of the worst – a very bad drought, but the  
35 amount of water that has been sucked out down the lower valley runs our – our water up there. So we ride around and we see animals stuck in these gullies and springs that we have never, ever seen go dry before, and that’s very, very distressing.

40 They’re in there. The animals are trying to get the last drop of water, and they get – and they die there. So that has never happened before, and that’s just the total result of the amount of water that is being sucked out from coal mining and is affecting us all. And on that rehabilitation, there was an example – a little micro example of what happened at Bickham; and, again, this is the industry-best standard. They – they wanted to put a bulk sample hole in, and that’s a very big hole that they put in, and  
45 the department said, “No, no. It will be rehabilitated, no problem. We’ve got a deposit.” So, at the end of the day, we ended up finding that that deposit was

\$50,000, and that hole is still there today. Has never, ever been rehabilitated. Now, I have a list here – a very long – how much time have I got left?

MR JAMES: You're over.

5

MR HAYDON: Okay. I'm over. All right. Sorry about that. So how do I sum up? Okay. I just think that, in our fight with Bickham, the shire council came up with this idea, which we all supported, how it should be a mining C precinct and that really should be listened to very, very carefully. You've got the voice of the Local Government that are opposing this, so you shouldn't really override that. And our area in Scone is so renowned for the horses we breed here. It's on a par with Kentucky in America and Newmarket in England and, of course, Winx was bred here.

15 So I will just run from my very short list, there's all the things you've got to look into. It's decision time. We need a final decision on this so there's certainty in the community. We want the mine C – a mine-free precinct. There's a lot of long-term damage for the small-term benefit. It's the location of this mine, because you've got Dartbrook and the Hunter River, that's a real problem. The community risk, that has already been touched on today. They would be very worried about going into mine expansion and going into open cut. There's coal combustibility problems and, of course, the water quality. Okay. Well, thank you for me going over, and thank you very much.

20  
25 PROF LIPMAN: Yes. Thank you, Peter. Wendy Wales. Are you ready to get your presentation?

MS W. WALES: Okay. My name is Wendy Wales and I'm representing the Denman Aberdeen Muswellbrook Scone Health Environment Group. We would like to acknowledge the Wanaruah People as the traditional custodians of the land we meet on today, and recognise their continuing connection to land, waters and culture. We would also like to pay our respects to their elders, past, present and emerging. We object to this modification and the supporting presentation on the grounds that it is another coal mine in a region already super-saturated with coal mines.

35

Air quality monitors have been issuing health alerts all summer, even straight after these recent rains. Commissioners, you have no idea how difficult this last summer has been for those of us who live here. The combined heat, drought, and awful air made it an ordeal we are so glad to be through, for some of us consider we're a bit through the drought. Surely, you must know that, with increased mining and burning of fossil fuels, we can only expect this dust and heat situation to get worse in the short and the long-term.

40  
45 Please notice the increasing number of people attending the IPCN meetings, and recognise that there is increasing community alarm with new mines, especially ones close to and upwind of our towns. The approval of the redesigned Mount Pleasant Mine at the end of its licence has distressed locals and anybody that drives through



Muswellbrook. How could this be allowed? Where is the duty of care for the health and welfare of the people who live in Muswellbrook. We don't believe buying a residential home in Muswellbrook would look like a safe investment of life savings now that the town is circled by coal mines. This blight on our landscape with its impacts beyond air quality and visual amenity has confirmed for people in the Upper Hunter Shire that they do not want open cut in their shire.

The council has committed to developing a climate emergency strategy. It should not be very difficult to join the dots between the horrific fires followed by the dreadful floods in Queensland with half a million cattle killed, the disastrous fires in Tasmania this summer, our fire seasons extended and overlapping with extended fire seasons in California, the devastating floods from Cyclone Adai affecting three million in Mozambique, Malawi and Zimbabwe just happening in March. 400,000 homeless in Mozambique and the death toll believed to be over 1000. Bigger and more devastating than Katrina, it barely made the news in Australia.

This catastrophic event are samples of what climate change looks and feels like, yet the investors and proponents of this mine reopening have not bothered to take the time to understand or learn about climate change. Climate change is what they will be really fuelling as they seek an opportunity to further build their fortunes; cashing in as bigger players quit coal. Climate change, put simply, is more extreme and more frequent weather events as a result of more heat in the system. The heat is trapped by greenhouse gases of which carbon dioxide is the most voluminous. Carbon dioxide is released when coal, oil and gas are burnt. The trapped heat means more energy for evaporation and greater temperature differentials for stronger winds. We should be keeping this carbon safety sequestered.

This application is for the development of an existing open cut – sorry, existing – it's a development of an existing mind on a shoestring. It was pretty clear to everyone at the community meeting Sunday night, that if the financial settings become right, the mine will go open cut after some official stamps have been added. For us that live here, this will be another devastating blow. We have experienced the changes of boom and bust: house prices go up then crash; rentals become unaffordable and people that can't afford anywhere else arrive with little support for them in place here.

But the mullock heaps on our near horizon are new. The health alerts are already unacceptably frequent as the designer, Howard Bridgman brought to the IPCN commissioners' attention early last year. Again, we ask the commissioners to not approve this mine being brought back into operation and that the proponent takes some time to investigate climate change and then see if they can take a different direction with their investment, one that will deliver food, clean air, improve water quality, and provide local jobs for the people of Aberdeen and Muswellbrook and, ultimately, the planet.

Repeatedly drawing the commissioners' attention to climate change does not come – does come at a cost when you live in a small community where many people think

coal is part of their identity. I regard this cost as completely parallel with what our earth is suffering. We are experiencing mass extinctions, loss of coral reefs, including the Great Barrier Reef. The world population is at seven billion. The easy-to-access resources have gone. And there is greater pressure on the remaining natural environment. We have so many problems to address, but are carrying on as if nothing is wrong until, perhaps, it's just too late. Thank you.

PROF LIPMAN: Thank you, Wendy. I think we will take a short 10 minute break, so if you'd like to make use of that. The next speaker after the break will be Bob Vickers.

**RECORDING SUSPENDED** [11.32 am]

**RECORDING RESUMED** [11.44 am]

PROF LIPMAN: Bob – you're Bob Vickers?

DR B. VICKERS: Yes.

PROF LIPMAN: Just wait until everybody is settled. Right. We have Bob Vickers as our next speaker. Before Bob begins, I would just like to mention that a few people have mentioned to me that it was very difficult to hear the speaker at the back, principally, I think, because the dais was turned to the front. We've now changed the position slightly and I would ask Bob and any further speakers to stand closer to the microphone. So could you please give me an – Bob, if you want to just say something and we will test it to see if they can hear at the back.

DR VICKERS: Good morning.

PROF LIPMAN: Can you hear? Terrific.

DR VICKERS: Beautiful. Good morning to the IPC Chair, distinguished panel members and members of the public here today. Thank you for the opportunity to speak about the Dartbrook Mine Modification. I would also first like to acknowledge the traditional owners of the land and water that we speak on today, the Wanaruah people. I would like to pay my respects to their elders past and present. My name is Bob Vickers. I was born and raised in Singleton. I am now a GP working in Singleton. I also represent Doctors for the Environment Australia, a national non-profit organisation of Australian doctors and medical students. We understand that a healthy population requires a healthy environment.

The threat of climate change is going to increase the risk of heat stress, extreme weather events, increases in infectious diseases, food insecurity, mental illness, injury and death. Temperature increase significantly affects vulnerable populations.

These are our older and younger populations, those with chronic diseases like diabetes, heart disease, kidney disease and others at risk of dehydration. January 2019 was the hottest Australian January since records began. We now have data to confirm that March was indeed the hottest on record. Parts of the country are still struggling to contain catastrophic bushfires while large areas of Australia are still in significant drought.

These natural disasters are indeed related to the effects of climate change and lead to direct and indirect negative health effects, as listed previously. This graph shows how Australia tracking with regards to meeting its climate change emissions reduction obligations. The dark blue line – that’s the emissions target reductions that fall under the most recent Paris agreement. The light blue line, the deeper trend down, is the actual Climate Change Authority’s recommendations for science-based targets for emissions reductions – this is what we should be going for. Paris, to be honest, was a bit of a cop-out. If Australia continues along its current emissions trajectory which is the line going up. We will be moving further away from both targets.

A study, a modelling in Nature last year, showed that a cascade of species extinctions will be associated with current trends in temperature increases. I cannot express the urgency with which we need to act to reduce emissions to have any hope of meeting both Paris and science-based emissions reductions targets. The Department of Planning and Environment – and I think this has been previously mentioned – actually has a Hunter Regional Plan which makes mention of managing the risks of climate change. I make note of point 16.3:

*Incorporate new knowledge on regional climate projections and related cumulative impacts in local plans for new urban development and manage the risk of climate change and improve the region’s resilience to flooding, sea level rise, bushfire, mine subsidence and land contamination.*

The new knowledge that we now have from recent reports and multiple previous studies is that we must be reducing our energy usage from coal as a percentage of total energy generation if we have any hope of reduction in cumulative impacts from global warming. To meet the Hunter Regional Plan actions, I recommend that this project not be approved and that no more coal mining be approved. This project’s application also has not considered the recent Rocky Hill Mine decision. Scope 3 emission must now be taken seriously in reviewing the impact coalmining will have. We need a rapid decrease in greenhouse gas emissions.

The harm to human health that 28.6 million tonnes of CO<sub>2</sub> emissions from the Dartbrook modification – this is calculating scope 1, 2 and 3 emissions – are not outweighed by the short-term gain in employment. If greenhouse gas emissions – and I’ve taken this beautiful calculation from Dr Ben Ewald’s written submissions as well – if greenhouse gas emissions are calculated per employee of the mine, it would be 10,000 times the average annual emission compared to the average Australian citizen. And then the fact that the proponents have expressed a desire to apply for an

open-cut expansion of this project shows clear disregard for the effects of greenhouse gas emissions on human health.

5 This project should not be approved due to its cumulative effects on anthropogenic  
climate change. Now, air quality. Air quality has been associated with multiple  
dangers to human health. Most people are now aware that poor air quality  
contributes to upper airway diseases, lower airway diseases and heart disease. PM10  
and PM2.5 particulates enter the lungs and the bloodstream and they can cause heart  
10 disease, lung cancer, asthma and acute lower respiratory symptoms. When  
combustion of coal is added to the consideration, we need to look at increased levels  
of sulphur and nitrogen dioxide. These chemicals are known to cause airway  
irritation, shortness of breath, headache, asthma exacerbations and in very high level  
exposures to nitrogen dioxide, for example after exposure to a blast plume near a  
mine, dangerous levels of lung inflammation can be fatal.

15 A recent study by Dr Ben Ewald, a GP and public health expert from the University  
of Newcastle showed that combustion of coal in New South Wales could lead to 233  
low birth weight babies and 369 people developing type 2 diabetes annually that  
otherwise wouldn't. Another mine project in the Hunter Valley poses a health risk to  
20 the local regions due to the cumulative effect of increasing air pollution and we  
would expect this to lead to higher rates of the previously mentioned illnesses. I  
really need to stress the word "cumulative". The argument that any air pollution is  
minor or insignificant which is the comments that are made by the Department of  
Planning and Environment and the proponent is invalid. All sources of air pollution  
25 must be mitigated. Current monitoring standards and compliance conditions are  
inadequate to protect the community against the health effects of air pollution.

I had three air quality alerts on my phone this morning this morning. This is despite  
there being heavy rain recently and little to no wind at this time. That's not an old  
30 photo; that's the photo from my bedroom this morning. That's Mount Arthur. They  
had three air quality alerts at 5 am and that's a blast plume at 9 am. So clearly the  
strict conditions are not a deterrent. It took the EPA – sorry, and that story at the  
bottom that has been cut off a bit – it took the EPA three years to financially punish  
Whitehaven for a dangerous blast plume. The paltry fine value was insignificant.  
35 It's not a deterrent to breaches of these strict conditions that are being apparently  
applied.

As shown previously, this is the more recent data for the average concentration of  
both PM2.5 and PM10 particles. Despite raising our concerns about air quality  
40 earlier last year, there have been a steady increase in the number of monitoring  
stations reporting particles above the recommended annual average. And we know  
that there's already existing health effects due to this. As you can see from the  
graph, the rate per 100,000 of children between the age of zero to 14 and respiratory  
presentations to ED between Singleton, Muswellbrook and other areas of New South  
45 Wales is considerably different. In 2007, a time proposed of significant coalmining  
activity, we saw a rate of asthma in this population more than double the rate of  
Sydney.

5 This correlates with my personal practice. I speak to parents who state to me that their children suffer poorly controlled asthma in Singleton despite best available medical management. When they leave town to go away on holidays, their children have much better asthma control. Many families have decided to move away from Singleton and the region due to these concerns. This project poses an unacceptable risk to human health due to its cumulative effect on air pollution in the Hunter Valley which is already at harmful levels.

10 Water quality and quantity have important health implications. The World Health Organisation estimates that eight litres of fresh water are required to dilute every litre of polluted water in order to prevent harmful contamination. The effects on the water quality and quantity due to this project will lead to increased incidences of excessive pollution and infectious diseases. For this reason, the Doctors for the Environment oppose the Dartbrook Coalmine Modification due to the risk of harm to  
15 human health and water security. There are social impacts on health as well. This project is being pushed as a good economic project. In reality, it is likely to create a handful of casual jobs for the region.

20 The Australian coal price is currently in a downward spiral due to decreasing demand overseas. Our major importers of coal are transitioning away. The economic benefits of this project are very much overstated. We will likely be left with a stranded asset. A large percentage of employees will be drive-in, drive-out. They create stress on local populations. They cause an increase in demand for a community's health and emergency services. There was a health report last year that  
25 showed every single emergency department decreasing or staying stable in the number of presentations; Singleton had increased 30 per cent and we had no increase in our population.

30 What we did have was 9000 casual workers driving in every day to the region from the Central Coast and Newcastle. More jobs in the mining sector are moving to casual contracts. Casual workers are paid less than permanent staff, further exacerbating health effects due to financial stress and its effect on mental and physical health. This project should also not be approved due to its likely negative impact on the social determinants of health. In summary, Doctors for the  
35 Environment Australia oppose the Dartbrook Modification due to concerns over risk to human health, directly and indirectly, from climate change, air pollution, social impacts and water impacts. It is also my professional opinion as a local GP that this project should not be approved. Thank you.

40

PROF LIPMAN: Thank you, Bob. Bev Smiles, please.

45 MS B. SMILES: Good morning, Commissioners, and thank you for inviting me to join the mine tour yesterday. I would also ask – like to acknowledge the traditional owners of this land we're meeting today. Hunter Communities Network was established in 2011 to representative communities living near coalmines in the Hunter region. The ongoing community, environmental and social impacts are a

5 result of a major imbalance in decision-making that has increased the disadvantage to bring the communities and isolated private property owners. In this submission summary I wish to raise a number of inadequacies in the assessment process, the response to submissions and the DPE report, particularly in relation to groundwater, greenhouse gas emissions and the DPE evaluation of the project.

10 The tunnel under the Hunter River leaks a significant annual volume of water. This has been reported as up to 180 mega litres a year in response to submissions report, and 156 mega litres a year in the DPE report, which we were told yesterday is an annual average of the life of the mine. DPE states that this seepage will continue regardless of the modification and that water access license is held that covers this water usage. The alluvium is recharged by surface water from rainfall and regulated releases from Glenbawn Dam. With the recent intense drought in the Upper Hunter, the alluvium would be recharged more from Glenbawn Dam.

15 This has an impact on overall water security in the region. The management of water and its source is a key issue for this protect that needs constant attention. The Dartbrook mine project is basically getting free water from Glenbawn Dam during the drought without having to order its release or pay for its storage like a regulated water license holder does. Dartbrook is not restricted through an annual water determination based on drought measures to secure water sharing from the dam. The Greater Hunter Regional Water Strategy released by DOI Water in November 2018 states that a key finding from the analysis is that:

25 *Drought security was confirmed as the primary economic risk facing the Upper Hunter. This risk extends to all sectors including urban, agriculture, mining and power generation. The pumping of good quality alluvial water into the Wynn seam goaf for storage is a problem in itself. This salinises the water and then it's pumped to evaporation ponds being wasted.*

30 Now, this was very disturbing for neighbours during the height of the drought when all neighbouring farm dams were dry and paddocks bare from lack of rain. So here's a photo of the evaporation ponds that we didn't get to see yesterday because of time constraints. They're all sitting there full, so that – I took that photo yesterday afternoon. There's no discussion throughout the assessment of this modification about the course of the seepage into the Hunter Tunnel.

40 The EA mentions that sections of the Hunter Tunnel have deteriorated in condition due to moisture. These are the sections below Dartbrook and the Hunter River that the modification proposes to replace by truck transport. The assessment process identifies that significant capital expenditure is required to recommission the Hunter Tunnel. Now, the community objected to a tunnel being constructed under the Hunter River in the first instance, when the Dartbrook coalmine project was initially assessed. The fact that the tunnel leaks is no surprise to anyone. The key concern now is that there has been no effort from the regulators to require the project owners to fix the problem. Now we're told that a substantial length of the tunnel has deteriorated because of the leakage.

Hunter Communities Network recommends that the tunnel either be fixed or filled in so that the seepage no longer occurs. The current water stored in the Wynn goaf – we were told over 3000 mega litres – should provide the project with adequate water supply. Dust suppression is now only required for coal storage and handling areas.

5

The proposal to build a new shaft into the tunnel approximately 70 metres deep on the alluvial flats has not been assessed for impact. The EA states that it is not known whether the alluvium bears water at the proposed location. The company maintains it would be too expensive to conduct an assessment, but if water is found they will align the shaft to prevent further leakage into the Hunter Tunnel. There appears to be access to irrigation, water from bores nearby, which we saw yesterday. This suck it and see approach post-mining approval is not good enough, and it's not good planning, and it has been the cause of environmental problems with mining in the past. Hunter Communities Network recommends that there needs to be an assessment of water levels at the location of the proposed shaft to inform the determination decision.

The response to submissions acknowledges that there has been no cumulative impact assessment of groundwater. It was disturbing that the Mount Pleasant modification 3 was approved without the updated groundwater model, and that the Mount Pleasant project proposed to store excess mine water from Dartbrook and Bengalla. This relationship has not been expanded on in the assessment of the Dartbrook modification 7.

The cumulative impact on all of the sources caused by the extensive mining operations from Dartbrook to Mount Arthur has not been established. The recent Hunter subregion bioregional assessment of the impacts of coalmining on water sources identify that hydrological change has occurred in the Muswellbrook area that impacts on base flows to the regulated river.

30

The Greater Hunter Regional Water Strategy notes that the combination of different methods of coal extraction, variability of climate-driven contributions to mine site supply, site-specific responses to groundwater ingress, connectivity to rivers and other surface water sources creates an extremely complex mosaic of water take. The report describes that mining operations take water from a number of supply sources, direct take, incidental take, interception take and indirect take. No one actually knows what volume of water this all adds up to across the Hunter region. Hunter Communities Network recommends that a full cumulative assessment of groundwater impacts be undertaken to inform the determination decision.

40

The assessment of greenhouse gas emissions for this proposal is very unsatisfactory. It was based on the estimation of scope 1 and scope 2 emissions from mining activity in 2006. 3.69 million tonnes of carbon dioxide equivalent is predicated over the 10-year duration of modification. The assessment assumes that the greenhouse gas emissions associated with fugitive emission and approved operational activities will not exceed the 2006 levels.

45

5 However, the reported level of methane fugitive emission have been increasing in the annual reports. The 2017-18 reporting period has measured 94,000 tonnes of carbon dioxide equivalent. This level appears to have been increasing over time. The prediction that the greenhouse gas emission will stay the same as 13 years ago is not based on actual reporting. The response to submissions did not adequately answer the issue of methane emissions over the time of care and maintenance. Also, as already stated, there is no assessment of scope 3 emissions as now required by the New South Wales planning system.

10 The costs-benefit analysis is based on the incorrect greenhouse gas assessment, thus the analysis of costs against public benefit is also incorrect. DPE make a recommendation to update the conditions for the operation and require a greenhouse gas management plan, but only mentions fuel consumption and energy use. There is no reference to the fugitive methane emissions.

15 In the economics analysis, only the cost of the water access license and the cost of the greenhouse gas emission based only on scope 1 and scope 2 are factored in. No other environmental impact is given a monetary value. Hunter Communities Network cannot support the DPE evaluation that close regard has been given to  
20 concerns raised by the community. We raised the issue of stability of bord and pillar mining above the Wynn seam goaf, which is a substantive section of the modification in the northeast of the mine area. Our submission referred to the commitment to undertake further studies to determine the size of existing voids in the Wynn seam, and emphasised that this work should be undertaken prior to  
25 determination. The DPE recommends the condition requiring a geotechnical study prior to mining in the area. The information obtained then could vastly change the design of the mine working and affect the volume of predicted extraction.

30 This could impact on the viability of the modification and significantly change the perceived public benefit. Hunter Communities Network recommends that the geotechnical study be taken prior to approval to better inform the determination decision. Overall, the benefits of the modification may not outweigh the costs, and the proposed recommended conditions of consent may not achieve an acceptable level of environmental performance. Thank you.

35 PROF LIPMAN: The next speaker is Sam Nugent.

40 MR S. NUGENT: Good afternoon, commissioners. My name is Sam Nugent. I'm an equine veterinarian of 24 years experience, and I'm a director of Scone Equine Hospital. I've lived and worked in the Upper Hunter for 20 years now. So I would like to thank you for the opportunity to present my submission on behalf of Scone Equine Hospital and to explain the details about our business, our relevance to the thoroughbred industry and to this Independent Planning Commission hearing. Scone  
45 Equine Hospital is the largest equine veterinary practice in Australia and, indeed, the Southern Hemisphere. We employ over 100 people, including 33 equine veterinarians, of which nine are registered specialists in either equine surgery, equine medicine or theriogenology. Now, we have a support team of approximately 70



people. Significantly, we are the major employer of professional and skilled people in rural New South Wales.

5 Veterinary specialists, technicians, scientists and their families relocate to this region to work for our business. Scone Equine Hospital provides primary veterinary care for 70 per cent of the stud farms and horses in the Upper Hunter and the specialist referral service for virtually all the industry in the region. Our business is a significant service provider to the thoroughbred industry with approximately 90 per cent of our turnover generated from these clients. As the largest equine veterinary practice in Australia we have the people, the knowledge, the equipment, the facilities to service every aspect of the many equine communities in the region. For over 60 years Scone Equine Hospital has been working with, living in and supporting our community. Our practice sponsors over 50 community groups and organisations and is a sponsor of all major horse-related events in the Upper Hunter, including the Scone Horse Festival Parade and the Aberdeen Highland Games which are both highlights on our community calendar.

20 Our surgical facility and intensive care hospital are major equine referral centre for local, state and interstate veterinarians. Our size and position in the equine industry ensures we can offer referral services and expertise at a level which would not be financially viable in a general veterinary practice. This ensures that our clients, whether they be local, interstate or international and their insurers have the confidence in the care that we can provide for their animals and their investments. Our practice is committed to ongoing research and training. Our veterinarians are recognised around the world for their knowledge and specialist skills, and Scone Equine Hospital is recognised as a world class centre of equine health. Our veterinarians are delivering world first research outcomes and advancements in equine care which are having major benefits both in Australia and internationally. Scone Equine veterinarians share information across the world and are part of the international education network for the veterinary profession.

35 Our veterinarians have published scientific articles in most of the major veterinary journals in the world and in the last few years alone have made scientific presentations at conferences in the United States, Dubai, England, Germany, South Africa, Hong Kong, Italy, Belgium and, of course, Australia. Scone Equine Veterinary Hospital serve as representatives on many of the equine organisations which administer, advocate and set the standards for equine healthcare, competition, education and professionalism, both locally and nationally. Scone Equine Hospital veterinarians are active contributors to the veterinary profession, serving in many positions on Equine Veterinarian Australia the executive and educational subcommittee and on the Australian and New Zealand College of Veterinary Scientists.

45 These organisations plan and organise the majority of the equine continuing education conferences in Australia, and the college is a professional organisation that provides postgraduate specialist training and examinations for our profession. Two of our veterinarians have been editors of the Australian Veterinary – sorry – Equine

Veterinary Australia scientific journal, and two have been national presidents of that organisation, soon to be three as I'm the incoming president. Scone Equine Hospital provides training for up to 40 veterinary students annually, and our team plays a significant role in the training of veterinary nurses at Scone TAFE. These  
5 educational roles are becoming more important as the number of students increases and the resources of the universities and TAFE struggled to keep pace.

Our practice is only able to provide this level of commitment to research, training and community support due to its size, case load and viability. It's a unique situation  
10 for a veterinary practice, and it's totally dependent on a strong and vibrant horse industry. Scone Equine Hospital has substantial plans to invest and grow. We are planning for a new state of the art Equine Hospital for many years and are well advanced with this process. This development is a major milestone for our practice and would reinforce the Upper Hunter's global position as the major equine centre in  
15 the Southern Hemisphere. The new facility will not only allow efficiencies in our current services, but will also allow us to offer new services, such as CT scanning and MRI. The facility has had and will continue to have major economic benefits to the region during planning, development and operation.

It would allow us to grow, thereby employing more people, delivering an increased level of service and research outcomes to the industry and the profession. The success of Scone Equine Hospital and our reputation as one of the major participants of the equine industry around the world is built on the strength of Scone and the Upper Hunter as the horse capital of Australia and the premier horse breeding area in  
20 the country. The equine industry in the Upper Hunter Valley is an extensive network of farms, suppliers and support businesses. It is recognised by the New South Wales State Government as a critical industry cluster because of the concentration and vertical integration of the farms and the support services. It's recognised by the horse industry around the world as one of only three centres of horse breeding  
25 excellence. The others being Kentucky in the US and Newmarket in England.

The stallion farms of Yarraman Park, Darley and Newgate which are all directly affected by this proposal are all direct clients of Scone Equine Hospital. However, their influence on our business and on the industry extends below their direct  
35 services to us. These stallion farms serve as the anchor that holds the broodmare farms and the support industries in the Upper Hunter. Damage to the air quality, water availability and visual amenity, as well as considerations of traffic safety and human health in the region will have significant adverse effects on the reputation, business and brand of these stallion farms and devastating flow-on effects to the  
40 support industry and mare farms which rely on their presence in the region. The horse raising land of the Hunter Valley is unique in the world, and it has attracted investment from around the country and from around the globe.

This sustainable land use and the horse knowledge and expertise which have been developed over the past 200 years cannot be lost for the sake of a short term,  
45 dangerous and destructive mining proposal. The previous Bickham and Drayton South Planning Assessment Commissions all recognised the importance of the

equine industry to the sustainability of the economy of the Upper Hunter region. They also recognised it as an asset to the state and national economies which must be protected. This recognition is especially important now as we move to developing a diverse and sustainable economy for the region as the destructive fossil fuel industry declines, renewable energy becomes more viable and we plan for a transition to a non-coal-based energy future.

It is inconceivable to us that a small, poorly planned, uneconomic mine which would cause irreparable harm to the local community, to a major agricultural tourism region and a significant international injury could in any way be considered a reasonable proposition. Commissioners, for the sake of our business, our industry, our environment and our community, Scone Equine Hospital and the people we serve in the Upper Hunter strongly urge you to reject this proposal. Thank you.

PROF LIPMAN: Thank you, Sam. The next speaker is Sue Abbott.

MS S. ABBOTT: Good afternoon, commissioners. I recognise the traditional owners of the lands, seas and rivers of Australia, and I pay my respects to Aboriginal and Torres Strait Islander elders past, present and those to come. I recognise that this land was never ceded. I am Sue Abbott. I am a local resident of the Upper Hunter Shire, and I live at Moobi, near Scone, with my husband. We came to live in the Upper Hunter in 1983. I am also a councillor on the Upper Hunter Shire Council, but I speak as a community member today.

I object to the entire modification and I consider that consent to the entire modification should be rejected. My submission focusses on the department's recommended conditions of consent which, in my opinion, do not address key community concerns. The community relies on the IPC to hear our views and then critically consider whether (a) recommended conditions go far enough to resolve identified concerns and historical inadequacies; or whether (b) conditions merely postpone unicorn thought bubbles to be revisited again after consent has been granted, leaving nothing resolved. In my submission, if the answer is (b), the modification should be refused.

In the limited time that I have today, my presentation focusses on the subheading of the air quality recommended condition, the Australian elephant in the room, climate change. In relation to climate change and the Dartbrook modification, I believe it is relevant to consider the persuasive Gloucester Resources Limited v the Minister for Planning case. When the Chief Judge of the New South Wales Land and Environment Court delivered judgment in the Rocky Hill case on 8 February 2019, it drew attention around the world, because it was the first time an Australian court had refused a coal mine, or any development, on the basis of its climate impact.

The court concluded that the mine would be in the wrong place at the wrong time. The wrong place, because of its incompatibility with residential amenity and other land users, its visual impacts, and its social impacts, including those caused by noise, dust and visual impacts. The wrong time, because greenhouse gas emissions of the

coal mine and its coal product would increase global total concentrations of greenhouse gases at a time when what is now urgently needed in order to meet generally agreed climate targets is a rapid decrease in greenhouse gas emission.

5 The Rocky Hill case demonstrates that climate change must be in the minds of decision-makers when assessing the impacts of greenhouse gas emissions on the climate, environment and people, and that decision-makers are obligated to make decisions having regard to limit global warming to 1.5 degrees Celsius above pre-industrial levels.

10 In relation to climate change impact and the modification, I note that the recommended conditions fall short of addressing cumulative impacts, amenity and health concerns and the mitigation measures mentioned in the recommended condition are only proposed and not clearly specified. I do not accept that the  
15 recommended conditions put forward by the proponents can condition away poor air quality, cumulative impacts amenity and health concerns.

In my opinion, the proponents have not turned their minds to the causal link between the modifications' cumulative greenhouse gas emissions and climate change and its  
20 consequences. In the Rocky Hill decision, Chief Justice Preston said that:

*It matters not that this aggregate of the project's GHG emissions may represent a small fraction of the global total of GHG emissions. The global problem of climate change needs to be addressed by multiple local actions to mitigate emissions by sources and remove GHGs by sinks.*  
25

In his judgment, Chief Justice Preston highlighted that Professor Will Steffen, an earth systems scientist, had pointed out that:

*Global greenhouse gas emissions are made up of millions, and probably  
30 hundreds of millions, of individual emissions around the globe.*

And that:

*All emissions are important because cumulatively they constitute the global  
35 total of greenhouse gas emissions, which are destabilising the global climate system at a rapid rate.*

In the Rocky Hill decision, the court accepted that Australia is a party to both the Climate Change Convention and the Paris Agreement:

40 *Under the Paris agreement, each party commits to make its contribution to keeping the global average temperature rise to between 1.5 to 2 degrees Celsius by reducing their GHG emissions through their nationally Determined Contributions (NDC). Australia's NDC is to reduce GHG emissions by 26 to  
45 28 per cent below 2005 levels by 2030. The New South Wales Government has endorsed the Paris Agreement and has set a more ambitious objective to achieve net zero emissions by 2050.*

Chief Justice Preston went on to say, in the Rocky Hill decision that:

5 *A commonly used approach to determine whether the NDCs of the parties to the Paris Agreement cumulatively will be sufficient to meet the long-term temperature goal of keeping the global temperature rise to between 1.5 degrees Celsius and 2 degrees Celsius is the carbon budget ...The carbon budget approach –*

10 it's the carbon budget approach, and that:

*...carbon budget approach "is a conceptually simple, yet scientifically robust, approach to estimating the level of greenhouse gas emission reductions required to meet a desired temperature target", such as the Paris Agreement.*

15 Once that carbon budget is spent:

20 *Emissions need to become "net zero" to avoid exceeding the temperature target. "Net zero" emissions means the magnitude of CO2 emissions to the atmosphere is matched by the magnitude of CO2 removed from the atmosphere.*

In the Rocky Hill decision, the court accepted Professor Steffen's expert opinion that:

25 *"Most of the world's existing fossil fuel reserves – coal, oil and gas – must be left in the ground, unburned, if the Paris accord climate targets are to be met ... the exploitation, and burning, of fossil fuel reserves leads to an increase in CO2 emissions when meeting the Paris accord climate targets requires a rapid and deep decrease in CO2 emissions."*

30 So no new fossil fuel development should be allowed. I note again that recommended conditions in the final assessment report for the Dartbrook modification cannot condition away the fact that the emissions of GHGs impacts the environment, nor can it condition away the fact the Dartbrook modification is inconsistent with the carbon budget approach we need to take towards climate  
35 stabilisation and the meeting of our Paris accord climate targets.

The department says it has assessed the merits of the proposed modification, having close regard to concerns raised by the community and advice provided by key government agencies and that, on balance, it considers the modification's benefits  
40 would outweigh its costs and that the modification would improve the overall viability of the mine by enabling underground mining operations to recommence, thereby allowing its potential social and economic benefits to be realised.

45 But our children are objecting to the burdens of fossil fuel projects; burdens that are being distributed to their generation and to future generations. They are not as confident as the department that the modification's benefits for such a fossil fuel project outweigh its costs. Children across the world are eschewing their education.

They are striking on Fridays and they are taking to the streets to protest against their leaders' wilful disregard of the catastrophic climate emergency we face today. Children are fed up with the lip service we pay to intergenerational equity, distributive equity, distributive inequity, distributive justice, the proportionality principle, ecologically sustainable development, and so on.

I live in the Upper Hunter Shire, where the local council has a no-mining policy. I am proud to live in a shire where the local council has this policy, as I am equally proud to live in a shire where the local council has resolved that we are in a state of climate emergency, and has acknowledged that urgent action is required from all levels of government, including local government. After reading the final assessment report, I do not consider the risks and potential impacts of the Dartbrook modification to be in the public interest or our children's interests. Thank you.

PROF LIPMAN: Thank you, Sue. Richard Abbott.

MR R. ABBOTT: Thank you for the opportunity to present to this IPC committee's proposed modification. I'm opposed to this modification on economic, environmental and health grounds. I would like to acknowledge the traditional owners of the land where we meet today and pay my respects to elders past, present and future. My name is Richard Abbott. I'm a general practitioner in Scone, where I've worked for the last 35 years. I live with my wife, Sue, some 10 kilometres north of the Dartbrook Mine, where we raised our four children.

During the last 35 years, I've observed the community in the Upper Hunter and wider New South Wales closely. I have watched the expansions of the mines up the valley and the increased open cut surrounding Muswellbrook and the difficult history of the Dartbrook mine. I have seen positive and negative benefits that come with mining, but since the initial consents of 1991 and 2000, the negatives have come to outweigh the positives.

In the early 2000s, when Dartbrook was operating, I had a patient who lived to the east of the mine. He was a farmer and he would attend regularly with respiratory symptoms associated with nausea and fatigue. At times, he complained of eye irritation and a scratchy throat. He knew what the problem was, although I could not really find a cause for his symptoms. He complained of smells and said he was worse when the wind blew from the west or on mornings when there was a temperature inversion or on warm summer evenings. It is now my medical opinion he was suffering from poor air quality.

Air quality issues associated with mining are well-documented and have been discussed today. The total suspended particles, TSP, the PM10s, the PM2.5s, all exacerbate asthma and chronic lung disease and increase susceptibility to respiratory infections. They affect heart disease and other chronic conditions. The PM2.5, being small enough to enter the bloodstream, cause issues with diabetes, ischemic heart disease, low birth weight and premature babies.

Many in the Upper Hunter Shire have moved here with the perception of clean air and, of course, mine dust and fugitive gas are not the only contributors to air pollution; bushfires, wood smoke, dust from inland happen, but largely beyond our control. Mine dust and mine air pollution add a significant amount to this and is in  
5 our control to prevent or reduce. According to Dr Ben Ewald with the Doctors for the Environment, air quality reform, that's limiting exposure, could prevent an estimated 3000 air pollution deaths per year in Australia.

Dartbrook was a known source of methane, a major greenhouse gas. Other toxic  
10 gases include sulphur dioxide, ozone, nitrogen dioxide, all causing respiratory symptoms, eye and throat irritations and other health effects. Carbon monoxide is also present. Ozone can travel distances and pools in the hot afternoons and evenings. Other gases are held with temperature inversions, common in the Upper  
15 Hunter in winter. This explains my patients' symptoms at different times. The upper limits of these toxic gases set by the EPA are debated and different in different jurisdictions. But as already mentioned today, there is no safe limit. And like  
cigarette smoke, none is best. There are ill effect with even low passive smoking. And the same for air pollution and toxins. The effects are cumulative with repeated  
20 exposure.

EPA monitoring sends alerts to mobile phones where air quality is considered  
hazardous. And, as it has already happened today, so what do you do? You ring the  
EPA; they tell you to go inside and, occasionally, find the perpetrators, relatively  
small amounts. The Department of Health website says, "Go inside. Walk, don't  
25 run. Avoid the outside air. See your doctor." Your doctor says, "Breathe good air. Use your puffers. Turn on your air con with a clean filter." But this is all shutting  
the door after the horse has bolted. The damage is already done. We've already  
breathed the air.

We treat the exacerbations at local hospitals. And asthma is a frightening disease.  
30 My colleagues in Muswellbrook and Singleton tell me there are more children presenting with asthma and respiratory effects as the mines increase and the westerly winds blow. Living in Scone we've been a little bit insulated from this, but it is coming. Asthma is exacerbated by many factors, including dust, smoke, allergens,  
35 cold air, but air pollution is a major driver. My oldest son suffered with asthma and he was worse when a southerly blew in. I also suffer mild asthma and know not to jog on days when the wind blows from the south. Aberdeen residents do not have a hospital; they go south or north to attend hospital. And with the increase in  
particulate matter that will follow if the modification is approved, it will be an  
40 increase in asthma and chronic lung presentations.

Dartbrook closed in 2006, due to ongoing methane explosion risk, water ingress and  
safety concerns with three deaths, and went into maintenance. After this time, my  
patients' symptoms began to clear up. Unfortunately, my asthma continues when the  
45 wind blows from the south. If the modification is approved, Dartbrook will go underground; so dust generation should be minimal, but not the fugitive gases. They will still be vented to the atmosphere and, depending on the breeze, go around the

valley. There will be 192 B-double diesel truck movements across the valley each day; vehicles on private road not subject to load assessments or emission monitoring that is required on road, carrying unwashed coal.

- 5 There will be 8000 tonnes of unwashed coal stored at the mine. And up to 400,000 tonnes maybe stored at the loading area, unwashed. There will be some 160 movements a year with uncovered wagons taking coal to Newcastle, passing through Muswellbrook, Singleton and the lower valley. And then there are the empty train returns: three large diesel motors, belching black smoke, PM2.5s, dust blowing  
10 everywhere. This coal-loading facility is less than two kilometres south of Aberdeen. Diesel emissions are known to be carcinogenic and face increasing restrictions around the world.

- 15 The lack of mental health services in the upper valley, overstretched, under-resourced, is well-known, and struggles to deal with the current case load. This leads to under-treatment and long wait times for professional counselling. Any increase in stress, anxiety and depression stretches the services further. Underground miners are at risk of stress and anxiety because of the nature of their job, the risks of dangerous work, and job insecurity. The price of coal fluctuates, like all commodities. Other  
20 health issues come with shift work and dust exposure, especially in confined spaces. Miners involved in mine accidents or near mines suffer post-traumatic stress.

- 25 The wider community is also affected. Air, noise and light pollution can impact on physical and mental health directly and indirectly. And as Judge Preston noted in the Rocky Hill decision, this does not have to be an actual threat; it can be a perceived threat to cause health issues. I'm seeing patients with anxiety and depression, with the fears of climate change, air quality deterioration and the perceived powerlessness to do anything about it a part of their distress. Patients have voiced their fear of an open cut mine close to Aberdeen, the stated aim of Australian Pacific Coal .....  
30 wanting to mine where a major company has already failed.

- 35 The original consent was given at a different time. There is now a much better understanding of the health implications, some of which have been outlined today. And we face a client emergency. The World Health Organisation regards climate change as the greatest threat to human health, a view recognised by the Australian Medical Association and Doctors for the Environment. This is the wrong modification to a wrong mine in a wrong place. Thank you.

- 40 PROF LIPMAN: Thank you, Richard. The next speaker is Bev Atkinson. Yes. Bev, can you speak into the microphone. That's great.

- 45 MS B. ATKINSON: That's better? Thank you, Commissioners. In honour of the Wanaruah people who nurtured this land, I object to modification 7. I've worked with engineers in England on the aspects of fitting motorway structures into rural landscapes with high tourism value. I live in Scone downwind of the site and I see it often. The tourism asset of the Hunter Valley is in great danger from Mod 7. AQC's



environmental responses conceal the ugliness and the risk of this. It's a gamble in the tightest part of the valley.

5 North of Muswellbrook, mining context changes. Valley floor narrows and everything on it is visible from above. Mount Pleasant mine shows us the shocking visibility of mining into the foothills. Screening can't work here, as it might down south, so one cannot believe AQC's yellow dots on the map, curiously labelled "view screened by river vegetation". The drama of the Upper Hunters the way the foothills and steep escarpments face each other across rolling farmlands. Travellers enjoy a rare stretch of farming country enclosed between high wooded horizons, one of the most beautiful in Australia. But AQC wants us to believe that all transport corridors have low environmental sensitivity.

15 So, they say, there's a spectacular hilltop lookout site. Currently it's a concrete plant in the wrong place, and it will move. The amazing valley draws people – valley view draws people to live on the Aberdeen hillsides, but AQC claims that the view only matters at nearest windows. AQC says trees would hide the tree-storey high metal sharp shed, but from where? We would be looking at parking areas for 50 cars and many B-doubles roads, surfacing, amenities, fuel, maybe mounds of non-coal as well, and still, hanging over us, this threat of a vast mullock heap around an acid lake dominating all valley views and restricting flood waters.

25 The site is at a pinch point where the 10 kilometre valley floor narrows like it does at Bickham to a neck of under six kilometres. This neck accommodates the highway, the railway, vital agriculture, two essential access roads, the Hunter River and three catchment streams converging to join it. Nearby Aberdeen looks down on all this, and to me it looks more sensitive than Rocky Hill, and it's soggy. A 1978 map shows four streams rising here and sinking again. Any mine dug across that narrow neck has to be a sump. In the 1920s, a troubled coalmine closed for the final time in this area, as recorded in the Thematic History of Kayuga. Approval in 1991 was a mistake we pay for now.

35 Heritage, cultural and archaeological potential are rich in this neck zone, but AQC downplays this. Any respect for history, nature and inhabitants would totally prohibit open-cut mining. Mod 7 modifies the current land take by about 5, and it exposes more coal to air than longwall. More dangerous gas would affect us and our farms. There may be concrete vent stacks. How big, how many, and where? How do they work in fire and flood? And are they also screened by trees. Scone already gets sulphur and dust from 30 kilometres south. Dartbrook is 10 kilometres from us, same direction. So poor Aberdeen. And the rising truck noise would spoil every teaching day at its two major schools.

45 Bord and pillar surely has to change the detailed work footprint, contrary to AQC's statement. Filing its final cavities with water is one stated plan, but who can be sure that water movement wouldn't spread pollutants into the alluvium, the aquifers and the Hunter River. I hear that mine workers used to stand deep in water but were told to keep quiet about it. In Aberdeen, people tell us of the gas problems, sirens and

fire engine attendances. Maybe consulting the formal records of accidents and emergency might show AQC and planning departments that further mining doesn't belong at this place. Thank you.

5 PROF LIPMAN: Thank you, Bev. The next speaker is Catherine Chicken.

MS C. CHICKEN: Thank you all for your time. My name is Catherine Chicken .....

10 PROF LIPMAN: Catherine, could you just talk into the microphone.

MS CHICKEN: Sure.

PROF LIPMAN: Can you manage there? I think Troy is down there next to you.

15 MS CHICKEN: Troy is just – he's just popping up a - - -

PROF LIPMAN: Right. Right.

MS CHICKEN: That better?

20

PROF LIPMAN: Yes.

25 MS CHICKEN: I'm Catherine Chicken. I am a consultant veterinarian with Scone Equine Hospital, and I sit on the Upper Hunter Air Quality Advisory Committee as a non-coal industry representative representing the horse industry. Most importantly, today, though, I'm a local community resident with grave concerns about the impact re-establishing working operations at the Dartbrook Mine pose to the health and wellbeing of the communities of the Upper Hunter, particularly the residents of Aberdeen, Muswellbrook, Scone and surrounds. I speak today as a deeply concerned  
30 long-time Upper Hunter resident. There are many areas of concern regarding the re-establishment of extractive operations at the troubled Dartbrook underground mine. The list is long, and concern in the community is high.

35 The issues I wish to focus on are the effects on air quality of the region, its visual impact and community health and wellbeing. Air quality has been of increasing concern for the whole Upper Hunter community for at least the last decade, as evidenced by the establishment of the Upper Hunter Air Quality Monitoring Network in 2011 installed in response to community concerns regarding air quality in the region in the face of increased coal mining activity.

40

The network provides valuable air quality data from the 14 PM10 and three PM2.5 particle monitors strategically located throughout the Upper Hunter Valley. The data is publicly available on the Office of Environment and Heritage website.

45 Unfortunately, air quality is deteriorating in the Upper Hunter, and this has been particularly apparent throughout the last two and a quarter years. Annual PM10 levels at the Muswellbrook, Muswellbrook north-west and Aberdeen monitoring

stations rose significantly throughout 2017 and '18 with levels for 2019 tracking upwards to date.

5 The annual PM10 levels in Muswellbrook in 2018 were above the NEPM 25 micrograms per metre cubed benchmark for the first time since monitoring began. So these are the last few years, 2011 to 2018, and Muswellbrook is over here. This is 25 micrograms per metre cubed, and it has tipped over the top. The other thing of note is that Aberdeen has spiked clearly higher, and Muswellbrook north-west is on 25 micrograms per metre cubed.

10 Since the establishment of the Mount Pleasant mine on the north-west outskirts of Muswellbrook Township in mid-2018 there have been significant increases in hourly PM10 levels at the Aberdeen and Muswellbrook north-west network station monitors, as clearly seen on many days by the naked day. The annual PM10 levels at 15 these two sites were dramatically higher in 2018 than '17, coinciding with increased activity at the Mount Pleasant mine site. Annual PM2.5 levels in Muswellbrook have never been at or under the eight microgram per metre cubed NEPM benchmark since monitoring began in 2012.

20 And this is the PM2.5 levels, and eight micrograms per metre cubed is here. There is present not monitoring – annual PM2.5 have never been at the eight microgram per metre cubed benchmark, and there's no prospect of that being achieved in the current climate. There's presently no monitoring of PM2.5 levels at Muswellbrook north- 25 west and Aberdeen stations. Data from the Air Quality Network and the subsequently generated seasonal air quality reports published and displayed on the EPA website provide the evidence base to the deteriorating air quality of this region. Any more pollutants from the Dartbrook Mine into the airshed of the Muswellbrook and Aberdeen area will only exacerbate this already significant problem. We have 30 got very good at monitoring air quality in this region, yet our abilities to improve it has been not nearly as successful, despite many valuable initiatives by the EPA in conjunction with the mining industry.

It's very difficult to see how the much-needed improvements in air quality are to be 35 achieved in the face of increasing coal production locally and evermore challenging climactic conditions, resulting from the local effects of climate change, effects manifesting primarily as increased ambient temperatures, decreased rainfall and more severe drought conditions. The impacts on PM2.5 levels of 192 truck movements per day, 11 hours per day, five days a week to transport coal under the New England Highway to a handling facility less than 1.5 kilometres from the 40 township of Aberdeen and adjacent to the highway are concerning for the health and wellbeing of the community, to say the least, and should be a major concern and consideration of this proposal.

45 Unlike in domestic vehicles, the emission from off-road diesel trucks are, effectively, unregulated, and as this proposal involves significant numbers of truck movements in close proximity to the Aberdeen township it will result in an increase in the already unacceptably high PM2.5 levels of this region. In addition, there will be added

PM2.5 emissions from the diesel trains hauling extracted coal from across the New England Highway at the coal handling facility to the port of Newcastle.

5 This aspect of impact for the proposal has not been sufficiently interrogated in consideration to the overall air quality impacts along the rail corridor and the implications of the emissions of climate change more broadly. We are dealing with a very different landscape, both literally and figuratively, in relation to the cumulative impacts of mining in this region on both air quality and, more broadly, climate change than when this mine was initially approved in the 1990s.

10 This must be considered closely in assessing the impact of any productive operations that this mine will now have. The visual impacts of mining in this region are significant and obvious for all of us to see and are now so wide-ranging they cannot be hidden from the major ingress and egress roads of the Upper Hunter. Promoting tourism and the Upper Hunter as a desirable destination to visit and live is already challenging in light of the severely impacted visual landscape from Singleton to Muswellbrook. The landscape of the Upper Hunter Shire is, as yet, unadulterated, and the community clearly want to keep it that way.

15 Given the proponent has openly expressed the intention to use underground operations as a precursor to an open-cut operation, approval of this proposed Modification 7 will provide the pathway to open-cut coal mining in the Upper Hunter Shire, a situation opposed by the local government and the community. Even viewed in isolation, which it shouldn't be, this mine modification with its significant truck movements and coal loading so close to the township of Aberdeen, abutting one of the major inland public highways of the state, will be an eyesore.

20 Visual impacts of ever-encroaching coal mining on the Upper Hunter region negatively affect investment in surrounding and productive land. The significant numbers of drive-in, drive-out workers at many of the Upper Hunter coal mines are a sign of the lack of desire of many of these workers to live locally. This means the traffic snake entering and exiting our region is increasingly creating congestion, contributing further to air pollution and negatively impacting residents of the area. Clearly, the appeal of living in close proximity to coal mines is not high for many of the DIDO workers. The flipside is that those residents living close by are left with a sense of solastalgia, the mental or existential distress caused by degradation of their environment. Of concern for the whole community, regardless of their workplaces, are the cumulative impacts of mining on health and wellbeing of all residents.

25 The cumulative impacts of mining on air quality and visual amenity are clear for all of us living in this district to see, smell and even at times taste. Emissions from aging coal-fired power stations, spontaneous combustion issues and dust emissions from open-cut coal mines are all contributing to unacceptable levels of impact on local communities. Most notably, a significant impact to the Upper Hunter Muswellbrook Shire residents is the newly established Mount Pleasant mine which since its establishment in mid-2018 has resulted in elevated coarse particle pollution detected at the Muswellbrook north-west and Aberdeen network monitors. It

provides a spectacular visual insult on arrival into Muswellbrook, and the dust emanating from the site is obvious to see.

5 Cumulative long term health effects of air pollution and the visual impacts from mining on residents of this region are yet to be determined. Importantly, for community members there are very real mental health impacts resulting from ongoing adulteration of the landscape. Epidemiological studies on physical and mental health impacts are not likely to be revealing due to the relatively small population size of the region, yet there is a need to more fully investigate and  
10 monitor the health impacts of mining activities in this area.

Epidemiological studies in large population bases throughout the world have shown the significant health impacts of air pollution and that no level of air pollution is regarded as safe. Considering elevated PM2.5 levels are recognised as the greatest  
15 risk to health, allowing any further increase in these pollutants, as would arise from the off-road diesel truck movements and additional activity at the coal handling facility created by this proposal, is not justifiable.

To get to the position of today where the residents of the township of Muswellbrook  
20 are surrounded by open-cut coal mines with the prospect of being impacted by more in the future, the process involved in the approval and monitoring of mining operations in this region must be seriously brought into question. The system is not serving residents and community members of the Upper Hunter at all, and the balance between mining and other coexisting industries has passed any sort of  
25 tipping point. We are now at the stage where mining operations are negatively impacting the communities of the Upper Hunter to an unprecedented level with respect to air quality, visual amenity and the associated mental and physical health effects that accompany this activity.

30 There is no room for more coal mining in this region. If we are to make a sensible transition away from a coal-based economy, a shift which has never been more urgent, we must preserve and support the other sectors of the local economy in order to preserve jobs into the future. I implore you, commissioners, to view this modification in broader terms than just the individual mine operation on the outskirts  
35 of Aberdeen and start the process of changing the landscape of this region for the betterment of all. Thank you.

PROF LIPMAN: Thank you very much, Catherine. Can I just ask anybody who  
40 has made submissions and has a presentation that they would like to hand it to hand it in to the secretariat so that we can place it on our website. We will have a break now for 30 minutes for lunch. Thank you very much.

45 **RECORDING SUSPENDED** [12.53 pm]

**RECORDING RESUMED** [1.32 pm]

PROF LIPMAN: Hello. I think we could – we are now going to commence the afternoon session. Our first speaker for the afternoon is John Bancroft.

5 MR J. BANCROFT: Hello. My name is John Bancroft, and I acknowledge that all the people in communities that allow me here to speak here today. I have been a resident of Muswellbrook for over 30 years and I am a member of Mount Arthur and Mullaba coal community consulting committee and Bengalla's finance committee. This community has been through this whole process a number of times; however, it is apparent that we are not being listened to and we continue to experience the same  
10 ill effects on a day-to-day basis.

AQC and the government departments this mine can go ahead and can recommence mining under their old conditions of consent. The company is using this as a bargaining tool to ensure modification is improved. Government departments said  
15 the modification should be approved as AQC has ticked all the boxes required. I'm a very practical man, so I know that the government departments and the mining industry make up these conditions so the mining can proceed. The EPA-approved method of modelling and assessment of air pollutions in New South Wales states, section 10.3, page 144:

20

*What information does the EPA use to set emission limits?*

The information submitted by the proponent in their impact assessment is used to set the emission limits for the project. So this means the EPA and other government  
25 department allow the mines to set their own emission limits. These limits are based on levels that are achievable through their application of reasonably available technology and good environmental practices. The assessment also states, section 10, page 444, paragraph 3:

30

*Emission limits in the POEA regulations do not take into account site-specific features such as ..... and background air quality and therefore do not necessarily protect against adverse air quality impacts in the area surrounding the mine.*

35

An objective shared by the EPA and POEO Act is to reduce risk to the human health and the environment by reducing to harmless levels the discharge of substances into the air. This means they approve conditions on the following basis. They are not site-specific to the mine or local weather conditions and they do not necessarily protect against air quality impacts in the area surrounding the mine, ie,  
40 Muswellbrook and Aberdeen. They are site specific to reduce risk to human health and environment. They are site specific to reduce toxic discharge substances into the air. The objects are the same for both the EPA and POEO Act, ie, not to protect the community's health or environment, but to reduce the impacts to a level that allows mines to continue their operation.

45

My question is, is the modification better for the community, the environment and the government? This modification will return less money to the government; the

- environment will have more toxic waste affecting air quality; the community, fewer jobs, more pollution and therefore fewer economic benefits than under the company's existing conditions of consent. So why would ..... this modification? There is no benefit to anyone other than AQC's profit. Why is the department asking the AQC to do more than a dozen important studies after the approval is granted? Is this putting the cart before the horse? There is studies – these studies should be done before the approval process. The EPA assessment for the mine states 92 per cent of total estimated PM2.5 emissions are due to above-ground coal handling and haulage.
- 10 Question: why not reinstate the conveyor underground equipment? This would certainly adhere to the conditions of consent for mining and reduce their emissions, an objective shared by the EPA and POEA Act. This must be the best alternative for all concerned and would meet the objectives of the EPA and POEA Act. It is, in fact, the only way to meet their objectives. Our communities are asked to accept the government department's decision, but with the above information. Can we accept that on face value? I understand that the department has a court case pending with Muswellbrook Council as a question of modifications to Mount Arthur. I will add my concerns as a member of the CCC concern the DPE and Mount Arthur's close association.
- 15
- 20 In October 2004 in the minutes recorded by Mount Arthur had for some time been so inaccurate that the department took action not to fix the problem, but instead sack the CCC right at the time that the new modification to Mount Arthur were improved, so no community involvement during this time. Then seven months later constitute a new CCC with independent chairperson and independent minute taker. There is a lot of talk about PM2.5. Everybody agrees with the World Health Organization that PM2.5 is carcinogenic, damages people's health including the lungs, heart, and causes diabetes, and there is no acceptable limits that will not cause health problems.
- 25
- 30 So how do we have a limit of eight microns that becomes the health damage line for the mining industry? Is the eight microns limit based on levels that are achievable through the application of reasonable available technology and good environmental practices as stated in the EPA guidelines? The mining ministry has not taken steps to reduce their reliance on diesel. I will use Mount Arthur as an example. They have 150 trucks that use 4500 litres a day each, and that equates to 245,700,000 litres a year, and this doesn't include cars and other mining equipment, and this is only one of six mines in the local area. Why? Because there's no incentive to reduce PM2.5 emissions.
- 35
- 40 Mount Arthur gets approximately 100 million in diesel rebates annually based on the above figures. Dartbrook has no incentive to use the underground tunnel when they can use trucks and get a rebate on their diesel use. My estimate based on non-existent B-double trucks that can carry 50 tonne, the rebate would be approximately 200,000 a year. I would like to note that most of the mines in this area are not required to monitor 2.5, so how can we have a true picture of cumulative impact and background limits? Does the panel know that between seven and 10 per cent of total
- 45

pharmaceutical scripts filled in Muswellbrook are for breathing difficulties, and this does not include other conditions associated with PM2.5 emissions.

5 My last question is the DP&E now states that bord and pillar type mining will have less impact on the drawdown levels of water and subsidence. Why did that department approve longwall mining in 1991 when they could have said no and approved bord and pillar mining instead which would have, as they now state, less impacts on parts of the environment.

10 This alone does not give me assurance that the approval will protect the environment or our community health. The close relationship between the mines and the government departments can also add to my concerns. This community asks you to reject and allow – and if AQC wants – to allow to mine under their existing use conditions of consent if they wish and I thank you very much.

15 PROF LIPMAN: Thank you, John. Tony O’Driscoll.

MR T. O’DRISCOLL: Good afternoon, commissioners. I would like to acknowledge the traditional owners of the land on which we meet today. I would  
20 also like to pay my respects to the elders past and present. My name is Tony O’Driscoll. I’m the chief financial officer of the Newgate Group, which operates a thoroughbred horse stud near Aberdeen. I am representing the Newgate owners, including our managing director, Henry Field, today. Henry Field founded Newgate in 2010 and it initially operated as a broodmare agistment farm until it stood its first  
25 stallion, Foxwedge, at Wakefield Stud in 2012.

In 2013, Newgate purchased one of the finest properties in the Hunter Valley, the historic Brooklyn Lodge Stud. Today, the Newgate operation includes over 2000  
30 acres of prime Hunter Valley land and is based on the foundation of quality bloodstock and people. We employ around 45 staff on a full-time basis and this increases to close to 70 during the breeding season. In the 2018 breeding season, Newgate stood 14 stallions which have an estimated value in excess of \$70 million. These stallions cover just under 1800 mares in 2018.

35 The extraordinary growth of the Newgate business in the last nine years is based on the willingness of the owners to invest in the Hunter Valley and the confidence that the stallion and broodmare owners have in both Newgate and the Hunter Valley. Newgate is now one of the major Australian thoroughbred breeding operations. I can  
40 tell you that this confidence is being eroded every time a new mine is approved and the mines move closer and closer to our operations. Newgate and the other thoroughbred studs care for thousands of very valuable horses. The owners of these horses have an expectation that the horses will receive the best of care in a pristine environment.

45 The reason the studs exist in the Hunter Valley is the quality of the land and the clean environment. This has been beyond reproach until the coal mine creep that has happened in the last 10 to 15 years. Broodmare and stallion owners do not want and



will not accept having their valuable bloodstock exposed to the outcomes that come with coal mining, such as dust, noise, visual degradation and water issues. If this mine and others like it proceed this close to the Upper Hunter horse studs, there is a huge risk the owners will take their horses elsewhere. This is a serious risk to our industry.

If that were to happen, it would have an enormous flow-on effect to the broodmare farms, farriers, vets, feed suppliers and others that support our industry and the local economy. Our industry is responsible for the employment of nearly 6000 people in this region and over half a billion dollars in value is added to the regional economy every year. Newgate alone has invested millions of dollars in the last two years building a new office, coverings, sheds, roads and housing. All this money went into the local economy. The major horse studs are all pristine and beautiful environments and they need to be protected. Five independent PACs have already come to that conclusion.

The thoroughbred industry in the Hunter Valley is a sustainable industry and has been here for nearly 200 years. To place this industry at risk for a short-term coal project with no economic benefits makes no sense. Water is also a major issue for our business and all local landholders. Water security can never be taken for granted and with Glenbawn Dam at close to 50 per cent capacity, there is a significant risk that water allocation will be cut if this drought continues. Allowing mines that provide no economic benefit such as this one to operate and take significant amounts of water does not make sense.

Visual impacts are also important to our industry. This one will create uncertainty and negativity in people's minds when they see how close Newgate is to this mine. The impact on clients or guests visiting Newgate when the prevailing winds are blowing in our direction will bring in the Dartbrook and Mount Pleasant dust and noise over our property will also be significant. It will damage our business, our reputation and that of our industry. Unfortunately, you have not visited any of the major horse studs to gain an understanding of our industry and to see the enormous investment that has been made. We strongly encourage you to do so. To make a decision on this mine without having an understanding of our industry means you will not be fully informed.

This is not a simple DA application. It's an application that will impact on a number of the major horse studs. We hope you will also seriously consider the cumulative impacts of this mine on top of Mount Pleasant and all the other mines in this area. The cumulative impacts of all these new mines have never been adequately assessed and the Hunter is now at a tipping point. It continues to confound our owners as to why the thoroughbred industry in the Hunter Valley, which is considered as one of the best in the world, is continually put at risk by coal mining and is not protected like the other major breeding centres around the world. We are seriously concerned with the negative effects mining is having on our ability to attract and secure further investment in the region. It is common knowledge in our industry that the

uncertainty associated with these mining applications is driving investment away and inhibiting us from making confident decisions about our future.

5 In conclusion, what you are considering is whether or not to allow an unproven  
operator to try to run a coal mine that one of the biggest companies in the world  
could not operate successfully; approve a mine that will provide no economic or  
social benefits; allow a mine that will take more water from an already distressed  
10 system in a time of serious drought; allow a mine to proceed when the risk of  
flooding has not been properly assessed; allow dust and noise to impact the local  
community and local businesses, including some of the major horse studs in  
Australia, the impacts of which have also not been properly assessed; to allow a  
mine to proceed that has not fully or properly considered the visual impacts; and to  
allow a modification that hasn't fully considered or assessed cumulative impacts.  
15 This modification will create significant risk to our business and industry. It appears  
quite clear that this modification is not in the public interest and should not be  
approved. To do so would be reckless and dangerous. We urge you to reject this  
modification. Thank you.

20 PROF LIPMAN: Thank you, Tony. Michael O'Connell, please.

MR M. O'CONNELL: Firstly, thank you, commissioners, for the opportunity to  
address the forum today. My name is Michael O'Connell. I've been a resident of  
Aberdeen living in the southern part of the township. My grandfather came to the  
locality approximately 120 years ago. I am a recently retired corporate banker,  
25 having spent circa 40 years in Australia and overseas, specialising in the provision of  
structured commodity finance and structured trade finance. I am a co-founder and  
co-owner of Fin Masterclass, a business formed to provide bespoke training in  
commodity finance and in trade finance to financial institutions and others involved  
in commodities and international trade.

30 I would like to speak to the Commission today in two parts: firstly, as a resident of  
Aberdeen and, secondly, from the perspective of a banker. Before I commence my  
address, I would like the Commission to note, generally, I'm not opposed to mining  
nor the controlled use of coal, per se, and I am pro-business, investment,  
35 development and job creation but not at any cost.

My comments as an Aberdeen resident: I am not a mining or environmental expert,  
so I will only state that I have real concerns in respect to increased risks to our  
communities from a mine on our doorstep via issues with air quality, coal dust, dust,  
40 gas, noise and light pollution, and pollution of our water resources. Also, accidents  
happen, even at most well run and controlled sites and this mine appears to have a  
particularly problematic history. I trust that the Commission will closely examine  
the above-mentioned and other risks during your deliberations.

45 My comments from a banker's perspective: the circa 40 years spent in banking have,  
no doubt, shaped my way of thinking. In some ways, government in this instance is  
not unlike a bank, with you, the Commission, acting in a similar gatekeeper role to a

bank's credit risk committee, albeit I do realise there are a range of additional considerations that the Commission must take into account. If I were being asked to consider this venture as a bankable or investment proposition, these are some of the issues, risks and uncertainties which I would raise with my credit risk committee and which I believe any potential banker/investor would be cognisant of.

The list of items and related comments are not exhaustive:

- (1) Is the customer, management and staff satisfactorily experienced in the business industry of the proposed venture?
- 10 This extremely important as inexperienced operators greatly increase the chances of mismanagement of the business and for things to go wrong.
- (2) What is the history of this asset? What is driving the customer to enter into the business venture?

15 Previous mine history suggests this is a complicated mine, with many challenges including high operational risk to staff. Previous experienced owner-operators have sold or mothballed this asset. Is the customer intending to operate the mine itself or lease it to another entity, or perhaps try to sell it for a profit should the modification be approved?

- (3) Does the proposed venture meet the bank's policies?
- 20 Some major banks in Australia have advised they will either no longer support new thermal coal projects or only consider those with coal specifications or when coal specifications exceed a very high level. International banks, hedge funds and others may have different policies.
- (4) Will the proposed venture be able to service its debt, cover its costs, meet its obligations and be profitable? Is it adequately capitalised and does it, in need, have the meaningful support of its parent to assist with operating requirements and/or unforeseen circumstances?

25 This is important as, generally speaking, a business experiencing financial difficulty may tend to cut corners, including reduced adherence to environmental and safety requirements. Without reviewing the business plan and projections of the proponent, which I'm not privy to, it is difficult to fully comment on its financial forecasts and viability.

30 I do note, however, that the vendor, Anglo, has still not been paid in full for the sale of the Dartbrook Mine. The parent entity, Australia Pacific Coal, whilst a publicly listed company, has a negative net worth of around 14.79 million as at 31 December 2018, and its auditors, Hall Chadwick, have qualified their accounts as follows:

35 *The group's current liabilities exceeded its current assets by \$11,706,808. As stated in note 1, these events or conditions, along with other matters set forth in*

*note 1, indicate that a material uncertainty exists that may cast significant doubt about the group's ability to continue as a going concern.*

5 Therefore, in the absence of additional capital and/or funding, it would appear that the parent entity is not in a good financial position and would be unlikely to be able to assist its subsidiary, the proponent, if so required.

(5) Does the proposed venture have the support of local government and the local community? Are all inherent risks and damages, etcetera, satisfactorily mitigated and/or compensated for by the proponent?

10 This forms part of a bank's corporate and social responsibility policy requirements. I note the objection of the Upper Hunter Valley Shire Council, the reservations expressed by the Muswellbrook Shire Council, and the community objections to the previous original application and the further objections being presented here today. The State of New South Wales is to receive royalty payments; however, from a  
15 monetary compensation perspective, local government appears to be inadequately compensated. For instance, a proposed payment of 100,000 per annum to the Upper Hunter Shire Council appears tiny. This appears inequitable also in comparison to the proposed royalty payments to existing financiers, Messrs Robinson Senior and Paspaley, of \$2 per tonne of coal sold and to the mine vendor, Anglo, of \$3 per  
20 metric tonne of coal sold. Local community is said to benefit from increased employment and business opportunities; however, these items are only aspirational targets.

25 Anecdotal evidence suggests that in other townships, mining staff are being imported from external areas, adding to traffic congestion and other social issues. It is unclear, perhaps unlikely, if any significant direct monetary compensation will ever find its way to the local townships and farms who will bear the brunt of adverse impact from the proposed mine and plant.

30 In summary, the acid is located in very close proximity to townships and farms, with significant risks of adverse impact to the communities. Dartbrook Mine has presented previous experience onus with unacceptable challenges. Full financial picture is not assessable; however, the parent entity has negative net worth and its current liabilities exceed its current assets. Corporate and social responsibility  
35 requirement outcomes are not yet fully determinable. On the information available, however, this would appear to be a difficult banking investment proposition for a responsible lender/investor to approve. Thank you for the opportunity to speak.

40 PROF LIPMAN: Thanks, Mark. Michael White is the next speaker.

MR M. WHITE: Good afternoon, commissioners. My name is Michael White. I'm a mining engineer, with more than 25 years experience in technical and operational roles both here in Australia and internationally for major mining companies. I have  
45 16 years experience in the coal industry in New South Wales and Queensland. For eight of those years I was responsible for the running of Mount Arthur Coal here at

Muswellbrook. I am providing consulting advice to HDBA on this project. I am also a local landowner. My farm is located approximately 20 kilometres west of this project and we have lived there for 17 years.

5 This application by Australia Pacific Coal should not be approved by the IPC. The  
key product quality assumption that drives the project profitability and the stated  
project economics is that the mine will produce 10 million tonnes of the unwashed  
product coal and, in the applicant's own wording, ranging from 15 to 24 per cent ash  
and averaging 5500 K KEL energy content. However, the applicant's own coal  
10 reserves information published in 2017 does not support this key product quality  
assumption. The impacts of this project have not been fully assessed by the applicant  
or by the Department of Planning and Environment.

Now, if we take a look at what a Newcastle 5500 NAR, meaning net as received,  
15 product is, the key things in coal quality are, essentially, the energy and the ash. The  
ash range, you will note here on the second line, is 17 to 23 per cent. Typical ash is  
described for that high ash product of 20 per cent. This is a standard traded coal  
product with a published price. Slide 4 is an extract from the applicant's published  
Kayuga seam underground reserve statement in February 2017. The acronym JORC  
20 – Joint Oil Reserves Committee – denotes quality standard for company reporting of  
mineral reserves and resources to which this report must comply.

10,000 million tonnes of extractable coal was identified in this statement. Not the  
average ash circled in red is 26.16 per cent. This is the average ash content across  
25 the planned mining tonnes when dilution from interburden and roof stone is implied,  
which is incurred during the actual mining process. The problem that the applicant  
faces is the planned product for the project – the 5500 K KEL – has an ash  
specification of 17 to 23 per cent. This is the product that has been used in the  
project's assumed coal price, revenues and the resulting project profitability and  
30 economic evaluation. There are areas within the mine which may allow this target  
product to be produced for a time, but this will effectively be high-grading coal  
reserves.

With an average unwashed coal product ash of 26 per cent, clearly, this product  
35 cannot consistently produce an average 20 per cent ash product over the 10 million  
tonne project life. The achieved prices for this project will be significantly lower  
than the applicant has used unless the coal quality is upgraded. Upgrading must  
mean not either washing to reduce the ash content of coal or blending with a lower  
ash coal from somewhere else to reduce the overall ash content of the product. So  
40 why do the coal washery operational impacts have to be included as part of the  
project impact assessment? Well, as we just discussed, in order to get this target  
product that they've talked about you need to upgrade coal quality and some coal  
washing or blending will be required, and AQC has said themselves that they may  
well wash coal at a later date.

45 Let's now talk about why in my view the coal washery operation was not currently  
included as part of the project proposal. AQC is not wanting, in my view, to restart

the washery because there would be an additional capital requirement of \$10 million. There would also be an ongoing cost – an operating cost of \$5.76 per tonne, and again that number comes from their own data, for every tonne washed. And, for example, if half the annual coal production of one and a half million tonnes, say, was washed, that would be an additional cost per year of \$4.32 million.

And also washing coal incurs a yield loss of approximately 25 per cent. So what this means is for every 100 tonnes mined that goes through the washery you get 75 tonnes of product, but you also produce 25 tonnes of rejects material, being the coarse rejects and the fine rejects, which has then got to be disposed of. So it would also involve tearing up the currently rehabilitated rejects emplacement area so that additional coal rejects could be placed there.

So the project elements that have not been assessed, in my review, are that the coal washery and its associated conveyors and infrastructure have been omitted from the noise and air quality modelling for this modification simply because the proponent says they don't plan at this time to use it. The operation of the coal washery has not been included in the ..... the rejects emplacement area has been omitted from the noise and air quality modelling, and at the western facility the Kayuga entry conveyor transfer point, radial stacker and stockpile have not been included in the air quality modelling. Only the loading of trucks has been included at that western facility.

So the impacts created by coal washery operation are that the washery operation will increase project noise. It will increase project dust impacts, it will increase project water consumption, it will produce coarse reject waste, fine reject waste. It will increase the project disturbed area because of the reopening of the rejects emplacement area, and it will also increase the visual impacts of the project.

Let's now move on to the project economics and profitability challenges. Sorry. So compared to our detail review, the AQC capital – they originally told us in the EA it was 15 million and then they changed it in the response to submissions to 45. Our review suggests that 162 million in capital would actually be required. The headcount – we did a detailed review. According to AQC they require 99 people to produce this coal. Our review suggests that depending whether it's a million or 1.5 they need somewhere between 140 and 158 people.

The coal quality issues I already talked about. There will either be a lower quality generating lower revenue than they've anticipated or there would be an increased cost per done by requiring additional processing costs in yield losses, and as a result the AQC estimated cost per tonne, I believe, is unrealistic due to the quality and headcount issues.

Now, I would like us just to have a quick look at – this is a price differential graph, and the important thing here is actually the red line. So this red line is the difference between the standard Newcastle 6000 coal product and the target product that Dartbrook said they could produce, which they can't, by the way. So you will see

through 2017 that their – the standard discount was around the 20-odd dollar mark. However, from March '18 onwards that discount level has gone from around the \$20 mark to over \$50 a tonne, and that's really a resistance by markets for this high-ash product.

5

Now, this is the product that they say they can produce and they can't, so we don't know how big the discount is actually going to be to their non-standard product. We don't have the answer to that, but we certainly know that the discount will be higher and their revenue, therefore, is going to be significantly impacted. I've included a couple of – you will have this presentation material. I've included a couple of slides here to show you the detail we did in the capital analysis and also the headcount, and you can review that when you've obviously got the time.

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But, in summary, this project proposal, in my view, is fatally flawed and will not deliver the benefits claimed. The target coal product cannot be consistently produced without upgrading the unwashed coal quality. The coal washery operational impacts have not been assessed in the proposed modification, and therefore I believe that this project should not be approved. Thank you.

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20 PROF LIPMAN: Katherine Brooks.

MS K. BROOKS: Thank you, Commissioners, for the opportunity to speak. My name is Katherine Brooks and I'm a very concerned local farmer with two properties between Aberdeen and Scone. My family – the McPhee family – have a long farming history in the Scone region. We go back to 1837 when my ancestors arrived in the Scone area. So I was in the global corporate world but came back home because I love the Hunter Valley and I love the land, and I now breed cattle and grow hay. So water is such a precious commodity to me. So we know how this underground water is going to be affected if this troubled Dartbrook mine is permitted to reopen? Judging from a transcript of the proponent's meeting with the Commissioners and the CEOs comments at a public meeting in Aberdeen last Sunday night, it seems this proponent has taken the view that they will jump off the bridge when they come to it. Very worrying.

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30

So Australian Pacific Coal is a new, totally inexperienced mining company. They've reapplied to open this safety-troubled mine. Can we be guaranteed that they can and will manage the water issues that plagued Anglo-American? Without experienced or strong financial backing can we be sure that they won't have a detrimental effect on our precious water supply? Has APC conducted extensive independent studies to ascertain the potential impact on our water? James Baily has conducted environmental assessments for APC, and I'm aware of an article that just – that appeared in the Sydney Morning Herald on 25 June 2011 raising questions regarding Mr Baily's impartiality with regard to the approval of the Shenhua mine in Gunnedah. So can we even have faith in his studies?

40

45

And to APC have the critical financial capabilities to resolve an unexpected disaster, or will the government and the community be left to bear the environmental and

social impacts? The time is not right. We're in a serious drought which has also impacted our scarce water resources. People across Australia are concerned for farmers and the communities suffering this one in 100 year drought, so why consider reopening this troubled mine with the potential to impact our precious water and a strong agricultural industry? I'm also a member of the Aberdeen Revitalisation Committee. The Upper Hunter Shire Council has tasked our group to develop ways in which we can revitalise Aberdeen, enhance the town's natural beauty and historical significance, making Aberdeen a more appealing town to live in and help generate greater tourism in the area.

Aberdeen has a rich Scottish heritage situated on the beautiful banks of the Hunter River. A river walk meandering along the banks of the pristine Hunter River is one of the planned projects to enhance Aberdeen, both for residents and for visitors, but how is the Dartbrook mine going to impact these future mines for Aberdeen? What will be the visual, the air and noise impact of 192 B-doubles loaded with dirty coal thundering around our fertile river flats every day. What will be the impact of stockpiling and loading unwashed coal at the Dartbrook CHPP, where we understand huge coal trains will be loaded at any time of the day or night, seven days a week.

The Dartbrook mine is on the doorstep of Aberdeen. It's 1.3 kilometres away from Aberdeen. Our rural areas and communities are already suffering from the pollution from existing mining operations. On numerous days, there's a strong, sulphurous bitumen smell in the air from uncontrolled, spontaneous combustion of coal. Fine particles of overburden and coal dust travel long distances on the wind. From our point of view, pollution from existing mining operations cannot and is not controlled and the burden is carried by our farmland, our farm animals and the food we produce. Where we sit today, we're surrounded by mines, and do you want to approve the same fate for Aberdeen and Scone?

Our experience, particularly over the last 10 years is that pollution from mining operations pervades our farmland and communities and there's little the EPA do to mitigate this, despite many attempts by the community to encourage the EPA to do what we, as a community, believe is their role. Quite simply, we see that our only opportunity to prevent pollution is at the approval stage. The reopening of Dartbrook Export Coal Mine is all about shareholder profit, not jobs, not about the people whose health, lives and livelihoods are at stake, not even about providing energy for New South Wales, and certainly not about the future.

With abundant sunshine and wind, we should be looking to produce non-polluting power. Destroying the remaining fertile and productive agricultural land is a crime. Once the land is mined, it's going to be destroyed. Together with us, the government should be fostering local communities to grow existing non-mining industries and develop new industries so that when the mines close, there's a vibrant and sustainable community left behind. The unfettered growth and expansion of the mining industry into the pristine Upper Hunter is unwanted, unnecessary, and will constrain our aspiration to maintain a healthy environment where existing and new industries can prosper. So many in our community are vehemently opposed to the



Dartbrook reopening, as demonstrated at the community forum in Aberdeen on Sunday night, attended by well over 100 concerned residents. Please reject this mine and support our community. Thank you.

5 PROF LIPMAN: Thank you, Kathy. Tom O'Connell, please.

MR T. O'CONNELL: My name is Tom O'Connell. Most of the things that I wanted to speak about have been dealt with by very, very good people. And just a couple of minor things that I would like to mention on top of what they've done.  
10 The haulage of the coal by B-doubles across the farmland – I understand the farmland is owned by the company, but it's still farmland and I think Mr Smith farms it. Now, you couldn't get better land than that. So they're going to use it for a haul road. And they had a tunnel that their predecessors had that – and they can't use it now. My understanding of it is that tunnel had three big pumps in it. No more could  
15 be used. And they pumped day and night to keep the water out of it, but if one failed, they had to stop. So they're in a predicament there. They're going to destroy farmland or are they going to have intermittent haulage through the tunnel.

The other thing I would like to mention, with the haulage by the road, it's not a – it's  
20 just a haul road belonging to the mines. When they get to their destination to go under the highway, if something happens that they can't do that – the mine has a crossing of the highway for cars and what not. It has been designed to be safely done, zigzagging – will they attempt to take those B-doubles across that? I think if, in the event of this ever being approved, there should be a definite no-no on that,  
25 because when you're desperate, you do certain things. Thank you.

PROF LIPMAN: Thank you, Tom. Cherry Hamson, please.

MS C. HAMSON: Thank you, commissions. I'm here to object to the proposed  
30 Dartbrook Coal Mine near Aberdeen for the following reasons. We are concerned about the health of the Hunter River from mining, which not only affects this area, but also further down the Hunter. Stockpiles of coal will be placed on productive land. Truck, rail and vehicle movements will cause dust and noise pollution as well as visual pollution. The Hunter Valley has already been devastated by coal mining.

35 The 2333 postcode is the most polluted postcode, we are told, just a stone's throw from Aberdeen. We worked hard to build our previous home, sheds and garden on Wybong Road from scratch and hand-watered more than 100 trees through many scorching summers to get them established only to have the Bengalla and Mount  
40 Pleasant proposals spring up on either side of us. The local community fought hard against the Bengalla Mine. We've been three times to the Land and Environment Court only to have then-planning Minister Craig Knowles change the rules with the stroke of a pen so the mine could go ahead. Our home was recently pushed into a hole. It sits under part of the dam for Mount Pleasant open cut.

45 This is why I can understand the devastation that will be felt by the families who will have their lives torn apart by this mine and to those who are not bought by the

mining company, but left to put up with it. Community is something you don't replace. Good friends and neighbours are hard to find. Watching out for each other, helping each other, and getting together for special occasions. Once the displacement process started, the good people we knew moved far and wide. Some  
5 moved to the Scone Shire, because of their position on mining. The Upper Hunter Shire Council was against mining in this shire.

We moved to Aberdeen and again have worked hard to build our own home and establish a productive farm. Then we find out that Dartbrook wants to reopen its  
10 underground operations. We are concerned about the serious detrimental effects on local water and air quality and to the health of the people. I attended a mine meeting at Aberdeen where I understood the company's CEO admitted they have no budget or plan for rehabilitation after mining. Surely this company and government  
15 departments have a duty of care to this community to respect this community.

Enough is enough. The Hunter Valley already has too many coal mines polluting its air, gobbling up its farming land, putting pressure on water supplies and generally spoiling the landscape that has been home to our families for more than five  
20 generations. The farms where people lives and made a living now lie barren on overburden hills. We ask that you reject this proposal. The coal is not going anywhere. It will still be there for generations in the future when methods may be improved. Thank you.

25 PROF LIPMAN: The next speaker is Peter Hodges.

MR P. HODGES: Thank you, commissioners, for the opportunity to talk and my respect to the Aboriginal people that once roamed this land. Firstly – straight off, I will say I'm dead against this proposal and for reasons that might come to light  
30 further down the track. Firstly, I'm no expert in the mining game, but I've had a reasonable amount of experience, having worked in three underground mines. I first started as an apprentice fitter machinist at the Aberdare East Colliery in 1970. We worked underground almost immediately and one feature of that particular mine was the acidic water – a huge problem – the life expectancy of a four inch galvanised  
35 pipe was measured in days.

I then worked at the Richmond Main Mine operated power station and that got burnt a few years ago with the fires destroyed quite a bit of stuff. Before transferring up to the Liddell Colliery. The Liddell Colliery was then using horses. The horses were  
40 fantastic, pulling electric cables with harnesses, plus parts and pumps in sleds. The conditions underground at the J&A Brown Liddell Mine in some sections were quite harsh. Whilst I was there, the government-owned Liddell State Mine, just down the road, caught fire in one of the vent shafts. The action was immediately carried out with a pit-top dozer to push material fill into the shaft to deny oxygen to the fire.  
45 The top of the shaft started to give way, taking the dozer with it. The driver leapt from the machine and was caught by his pit-belt by another miner, otherwise, he would have gone down with the machine.

I believe the dozer landed up – I’m led to believe the dozer landed upright at the bottom and kept ticking over for some time, several days. I was basically a tradie, but at times you ended up at the coal face. Bord and pillar work is reasonably predictable, but what most people outside the industry don’t realise, the deaths – the risk of death and injury goes up considerably when the retreat process is initiated or, to put it in Australian terms, pillar extraction; that is when the bord and pillar work is completed at the end of the lease or section, the mining process starts to withdraw, taking the 50 by 50 metre pillars out that support the roof. Along with the increased risk, there is increased production, hence, that’s where the money is in that type of mine, not just sticking with straight bord and pillar.

It is absolutely essentially that the deputy, the miner driver, and the cable hand have had long-term experience, otherwise tragedy could unfold, because when pillars are being removed, to actually get the roof to drop, the miner driver has to take as much out of the remaining stook on that 50 by 50 metre pillar so that the roof will fall in a timely manner. If they leave too much, it can actually put more back into the remaining supporting pillars. So you need a deputy and a driver that knows what he’s doing. And I was actually there one night when the deputy quietly – he was watching it – he walked up to the miner driver and tapped him on the shoulder and “it’s time to go”. So then they started to back the machinery down, put the breakaway props, and down it came. I will explain Moura later on.

Whilst I was at the state mine, a 200-metre longwall machine was installed. It’s much safer to work under a steel canopy held up by 120 hydraulically-operated chocks with a support rating of over 700 tonnes per chock. When the longwall was started, it could cut 1000 tonnes in 20 minutes and could operate 24 hours a day, seven days a week – a staggering amount when continuous mining machine and shuttle cars where, on a good shift with a good crew, would do well to cut up to 1500 tonnes in a seven-hour shift. So 1500 tonnes was the max, whereas in a day with a longwall, 75,000 tonnes, yet this mine is going from longwall back to bord and pillar.

I am concerned this DA modification is a dud and opening the mine is dangerous. It is noted for its methane gas and its proximity near and under the Hunter River is unacceptable in terms of water. Why worry about the gas? Methane can show up any time, more likely at the coal face or where the incoming air may be restricted. The continuous mining machine has water sprays embedded in the cutting head, so that if there are sparks from the cutting picks hitting hard stone or whatever there may be, there is less chance of methane igniting. If, for example, a methane explosion occurs, that in turn can cause an instant reversal of the incoming airflow. This, in turn, can knock coal dust off the roof and the side ribs – sorry. This, in turn, can knock coal dust off the rib and the side ribs and props and lead to a secondary explosion that can be more devastating in terms of impact.

To offset this, the miners, or as we affectionately call them, the feds, would spray the roof, floor and ribs – which is the sides – with limestone dust. That would attract moisture and help bind the coal dust to try and limit the chances of a secondary explosion, plus the stone dust is white, so the vision improves dramatically. Just to

give you an example when things go wrong, in 1972, the Box Flat Mine near Ipswich exploded, killing 17 miners. In 1975, the Moura-Kianga Mine exploded, killing 13 miners – miners sealed. In 1979, the Appin explosion killed 14 miners. In 1986 – and my father and I had just driven past the town when this had happened – the Moura No. 4 Mine exploded, killing 12 miners. In 1994, Moura No. 2 Mine exploded, killing 11 miners. A second explosion two days later meant that the rescue had to be abandoned and people were left behind. In 1996, the Gretley Mine near Newcastle – four miners were killed. The mining machine broke into old flooded workings, so it was the water that was the killer in this mine.

Since the 1960s, 50 people from the town of Moura have been killed in the mines. So the Dartbrook mine – the reason it was closed was because of the water and it was closed because of the gas and, believe me, anybody that puts their pencil to a piece of paper to approve this mine in future operations must take into consideration what they're signing for. You have a tremendous responsibility. I could say more but I will sign off early and give everybody a rest, but thank you for having the opportunity but I'm dead against it.

PROF LIPMAN: Thank you, Peter. Doug Robertson.

MR D. ROBERTSON: Thank you, Commissioners, for your time this afternoon. My family has bred seedstock beef cattle for over 105 years and over five generations on our property ..... located nine kilometres north of the mine and this kind of history is repeated across many other farms in the area. I have many concerns with this proposed modification and, above all, I believe there is no social licence for this mine to recommence operations, as was clearly demonstrated on Sunday night at a meeting in Aberdeen of the local community.

I would firstly question how this is a modification when the mine has been closed for some 13 years and, in its sun-setting days, a first-time miner presents such a weak case to begin operations again – weaknesses that have and will be outlined by many qualified people today. This mine has been blamed by many of its neighbours for depleting their alluvial water and some will argue, even in care and maintenance, it has still not recovered. This evidence is anecdotal because there was little or no monitoring conducted by the department prior to the development.

This being the case, the fact remains the community has serious concerns about this valuable resource and, in addition, as a local farmer, I find it extremely concerning in our current drought, with significantly depleted water available, as has been mentioned today by numerous speakers, to see the photos that were put up earlier of this mine's contaminated water filling evaporation ponds. You must protect our water.

The Upper Hunter has a considerable footprint in terms of beef production. We have two major selling centres and two large processing plants and, along with other marketing options available, the estimated annual turnover of cattle in this region is 500 million. That's half a billion dollars – a sustainable industry that takes care of its

resources, such as water, and has been here for generations and will continue for many more if we have security from being overrun by mines. For the past 12 years, I have run the Upper Hunter Beef Bonanza, now the largest junior cattle show in Australia. This event last year exposed over 800 school-aged competitors to the beef industry and, more broadly, agriculture in general and with the employment opportunities it offers.

We may not employ the numbers in the short term the mines do but our jobs are ongoing for generations. Our young skilled workforce is constantly being taken by the mining industry. We need an industry balance in this region. The Department of Planning needs to be aware of other existing sustainable industries. In our seedstock business, we strive to improve our product in all aspects. Like many industries, red meat has the challenge to improve its footprint on methane emissions. It is doing this by measurement and adapting diet and genetics. This mine was approved over 25 years ago and our community concerns have shifted considerably in the time with regard to climate change.

How do you, the commissioners, guarantee us that this proponent will take the necessary steps to control their emissions? Our beef industry, like other sustainable industries in the area, need to be acknowledged by the government and the planning departments. Even Glencore, one of the biggest miners, has hit the pause button in this region. We need our government and Department of Planning and Environment to do the same. Thank you.

PROF LIPMAN: Thank you, Jason. Kirsty O'Connell.

MR .....: Doug. Doug.

PROF LIPMAN: Sorry.

MR .....: It was Doug.

MR J. CHESWORTH: Thank you to the Commission for coming up – no, I've broken it already. Now, on a lighter note, I just want to congratulate everyone that has spoken today. I think it has been a breath of fresh air that we're pretty responsible and mature in the way that we've all stood up here and put our point across.

MR .....: This is Jason.

PROF LIPMAN: Yes. This is Jason Chesworth.

MR CHESWORTH: And I think that in the current week where we have vegan activists showing how not to have a look at a point and talk about it – but my name is Jason and I'm the seventh generation of the Chesworth family to be involved within the agriculture field based along the banks of the mighty Hunter River for the last 160 years. I spent my early days helping my parents milk 400 cows at Denman and

in 2007, in the last major drought, Mum and Dad made the decision on the back of an eight per cent water allocation to sell the cows and, ultimately, the farm.

5 As they wound up their farming enterprises, Hunter Belle Cheese, a small artisan cheese factory, came up for sale. They jumped at the opportunity to stay a part of the dairy industry, but also, most importantly, to stay here in the Upper Hunter Valley. On the back of this ii left university afters studying agribusiness and headed to Holland to be trained in commodity trading on the world dairy market.

10 My morals and ethics came into question when I discovered that these traders were making massive product margins with very little capital needed to operate, and hence quite low risk business, compared to my parents, who had just been forced to sell out due to the super environmental risk in the form of the biggest drought they've ever seen along with the diminishing margins since the industry was deregulated. This  
15 gave me a massive insight into the corporate world and just how ruthless it can be.

Trying to get back in touch with my farming roots led me towards the farmers in the dairy supply chain focusing on dairy nutrition whilst helping mum and dad grow their small cheese business, which in the meantime had also added a café and dairy  
20 education activation zones that had cement themselves as an A1 tourist destination in the Upper Hunter.

Fast-forward to 2019. Myself, along with my wife, Annie, employ 15 fulltime  
25 equivalents at our Scone manufacturing site while Mum and Dad employ 10 fulltime equivalents between the Muswellbrook Café and the Pokolbin retail outlet. While some of you may have seen a for sale sign with some creative marketing on one of our premises, it is only the building for sale, nor our business. Purely the estate of the great, late Keith Yore is being resolved. At this point in writing my speech I was guilty that it was all about me. And then I realised that's actually the point. I'm a  
30 son of the Hunter Valley with its blood flowing through my veins. That's what has created the passion that I now have, and I want to make sure that the next generation of sons and daughters has the same chance and opportunity to learn what that passion means.

35 I love representing the Hunter Valley, and I've done so through TV, in My Kitchen Rules, Better Homes and Gardens, and recently have been appointed as a New South Wales ambassador for the Cancer Council. We love that we've been able to have the opportunity to develop this locally and we relish the local people that we employ and the community area that we service. We see firsthand the diversity that this area has  
40 and have come to love this. Without this diversity many people would be forced to leave the area to find suitable jobs. My brother has been trained as a fitter and turner in the mining industry, and my sister studied business studies at Newcastle Uni before entering the local banking industry.

45 Without the great diversification of the Upper Hunter this would not have been possible. We also really value the diversification of the skillsets the Upper Hunter has to offer. We employ many people from different backgrounds to mining to the

farming and to the service industry that supplies both. Without these skillsets our business would not be able to compete against the major multinationals of the shelves of the major supermarkets in this country like we do.

- 5 Even myself, I've learned a lot from our mining trained employees, so first hand I know how great the mining industry does training their workforce. Now, I don't pretend to know a lot about the mining industry, but after living here for 30 years you pick up a few things. I fully understand that the Upper Hunter needs a thriving coal industry to keep moving forward on the economic front, but more than ever we also
- 10 have an obligation to the future generations when it comes to our resource usage. The current Upper Hunter mining industry is first class and ready to increase production when times are good to take advantage of the world coal market. But also being able to sustain itself through harder times, both now and into the future.
- 15 This will become extremely important over the next 20 years, equally as important as these new investments as world markets across all major commodities continue to fluctuate and will continue to do so, making downturn and efficiencies management as important as ever. So to approve a new mine for me, when we already have so many world-class mining sites in close proximity, sort of just feels like the corporate
- 20 world is clutching for anything they can see in dollars and cents – more dollars and cents in my life learnings.

One of the biggest differences I learnt when I left the corporate world and came back to a small family-owned and operated business in a small country town was the

25 business decision-making process. I had been trained to be ruthless by the corporates, to spot an opportunity and to do whatever I could to maximise profit margins, hold maximum value in the supply chain, and if you had to burn a bridge or two to do it, no worries; there's plenty more fish in the sea to do business with.

30 This cannot be said of a small regional town. The community is tight-knitted and without the community support so many things from kids' sports to drama to music wouldn't happen. This isn't like the city where programs exist for things like this with paid employees to make sure the young generation is catered to. Without the effort of many small, local businesses, parents and community groups, many

35 activities and events such as this wouldn't happen.

With this brings much more responsibility to the table of managing a business, from the people you employ to the local clubs and events you support. It's certainly much more difficult sometimes to commit to their causes financially and time wise, but

40 when you understand the benefit and the reward it's certainly more pleasing in the game of life than lifting your profit margin by one or two per cent. This is where I struggle to understand why this proposal is being made. I believe we have a fully-developed mining industry already here, so for any old mothball mines like this to be pulled back into question is beyond me. It would be like restarting the 300 dairy

45 farms that all milk between 30 to 60 cows back before 1985, and we're certainly not going back there any time soon.

What I want for the Upper Hunter is for the current balance not to go any further, to stay at least where it is. Over the past 10 years if anything I've felt that we've put too much reliance and pressure on the mining industry, and this caused the local area financial hardships with the coal price crash of 2010. We need to make sure that we  
5 keep the diversification balance growing. This is the reason that I was drawn home to grow a now-successful business. If we lose this then what opportunities will be available to my children? And the answer is there won't be if we keep going down this road. They won't value the land like I do because the mining companies and the government doesn't value the land.

10 If we allow this one-sided mine development theme of the past 20 years to continue there won't be a reason for the likes of my children to be proud to represent the Upper Hunter Valley. If we learned anything from the crash of 2010 is was the fact that we had put too much pressure on the mining industry to keep the whole town  
15 afloat. We need to development new businesses and opportunities to make sure we keep the passion alive inside the Upper Hunter, and this will make sure that the next generation of sons and daughters will have the ability to come home to their grassroots, raise their family and support a local community. As you can see, I'm a very passionate individual when it comes to the Upper Hunter. I love what we have  
20 and would do anything to make sure that this generation pays its due diligence when planning for future generations to come.

The question we need to ask ourselves is what is there to gain versus what is there lose? For me, the gains of promises held by companies that we the community  
25 cannot trust to uphold over the test of time. There will be certain ownership changes that it will go through in this day and age, and it seems to be completely inevitable in the business world. How we – how can we be sure that these gains will be sustainably managed for the future of the community?

30 The losses and risks and fairly certain, but the gains weigh in the balance of a world that is inconsistent. What does it mean for our business? Every time another mine opens or reopens it gets harder to paint the Upper Hunter in any sort of a clean image, which when you're trying to sell a gourmet artisan food product is a massive  
35 consideration. The more we give in to one particular industry means all the other industries find it harder to operate, harder to get the valuable services and reputations needed in this day and age.

What does it mean for my kids? I want them to have the same opportunities to be able to make the same decision that I did. I want to make sure that that next  
40 generation of sons and daughters has an opportunity to choose their future. What will our generation be known for in 200 years time? Will we be considered the village idiot at the time who failed to acknowledge the changing market place of the world economy and chase profits with no consideration of future generations, or will we be known as the generation who adapted to still drive our region's economics  
45 while also improving emissions worldwide?



I often hear my dad talk about the definition of sustainability and the community. I've never heard it come from the mouth of a CEO, at least from their heart in a genuine way. They're normally too tied up in KPIs and profit margins. I will skip that; we will close it up. In closing, the people who want this mine don't work here, they don't live here, they don't care about here, and that's all it is to them. Here. Not the beautiful Upper Hunter, but here, just another hole in the ground. Just another postcode on their investment portfolio. They don't see where these mines are located or the daily impacts it has on this community. They just see dollars and cents. Let's take this opportunity to tell the corporate representatives and New South Wales government that we will not be a yes man anymore.

For the past 30 years the mining companies have had free reign and they've built a massive industry that supports too many of us, both directly and indirectly, as in my case. Please let us be smart with our futures. Let's not just say yes; let's ask questions and hold the responsibility of operating a business in the Upper Hunter just as I do with integrity and passion of the highest ethics and morals. Let's continue to develop the diversification of the Hunter Valley, not the continuation of the monoculture of resource harvesting. No worries.

PROF LIPMAN: Can we have Kirsten O'Connell, please – Kirsty O'Connell. So  
- - -

MS K. O'CONNELL: That's fine. Good afternoon, Zada, Peter and Ross. Thank you for coming to the beautiful Upper Hunter. We do love this place, and it's nice to have you hear. My name is Kirsty O'Connell, and I'm here as a representative of a group called Friends of the Upper Hunter and also as a representative of the wider Upper Hunter community. Friends of the Upper Hunter is a group of farmers, landowners, business people, health experts, parents and grandparents. We don't see our group as anti-mining but rather as pro-balance. We acknowledge the economic benefits that mining has delivered, but we believe there has to be balance and space left for our communities and our other industries to flourish.

Our group formed in direct response to the significant concerns that this community is raising about the Dartbrook Underground Mine and also about the statements made by this proponent to its investors in the Stock Exchange about their plans for an open cut mine. We believe the Upper Hunter has an incredibly important role to play in the future transition of this area. As our region transitions away from coal, we can invest in our other sustainable industries. Our agricultural and our tourism-based economy can be further strengthened in a way that's sympathetic with our unspoilt local landscape, a landscape that bears striking similarities to the beautiful Gloucester basin.

If we invest now in our non-mining industries, we can be ready to help provide secure, satisfying jobs for local workers in the mining sector as they exit the industry over the coming decades, but we can only provide that safety net during the transition if we have protection for our communities, our environment, our high quality agricultural land, our water and our industries. That's where we need your

help. We respectfully put to you that there has to be a point where we draw the line. If we're not going to draw a line around the biased physical strategic agricultural land on which this mine sits and which surround this mine, if we're not going to draw a line around the Hunter River, or if we're not going to listen to a council that has a track record of opposing mining for over 30 years, moreover, if we're not going to listen to community members who have almost universal concerns about their air, water and health, then when are we going to draw the line and where?

Do we just mine the whole lot? We put to you that in the 13 years since this mine was mothballed, quite a lot has changed, and it is now entirely inconsistent with our vision for this region and with the priorities set by the Department of Planning and Environment in their own Hunter Regional Plan 2036. I draw your attention to the priorities that they set for the Upper Hunter. We wholeheartedly support these priorities, and we know, to protect the equine cluster, to protect our agricultural lands, to support the tourism economy, to encourage the establishment of employment-generating rural industry such as Jason's at Hunter Belle, to support the diversification of the energy centre and particularly noting that the Upper Hunter LGA is part of the Upper Hunter green energy precinct. We agree.

We are baffled as to how this same department would then recommend the restart of a risky underground mine, with marginal profit margins at best, in the Upper Hunter, contrary to its own priorities and against the wishes of the local people and the local council. Also, with respect to the department's assessment, we think it's disingenuous to compare the impacts of what's proposed against what is approved. Anglo American was a very significant and experienced operator. They gave their best effort to get this mine to work to their approval and they failed, multiple times. This proponent has shown no appetite to mine to the conditions of consent that they have. We need to be practical and acknowledge that the real impact of the mine is what we're experiencing in care and maintenance and what we've been experiencing for 13 years; not what's approved.

In the month since Friends of the Upper Hunter formed, we've consulted widely with the local community which, regrettably, this proponent has failed to do in the two years since they purchased this mothball asset. I would like to draw your attention to – and it's a terrible photograph; it's a little dark. We've received reams of feedback from the local community. We've had direct conversations with greater than 300 people, and these are not short conversations, I can tell you. They take an hour. It has been a significant undertaking from our community. We've engaged through the local media, our website, our Facebook page, mail drops and our attendance at several community events.

This Sunday past, after concluding that this proponent evidently had no intention of doing so, we conducted our own community forum. This public event was widely advertised, and in the five days prior, and was attended by more than 100 people who freely gave us their feedback and shared their concerns and questions about this mine. We will be documenting that consultation fully and providing that to you as part of our written report. One of the things we've heard through our consultation –

and it's something that one of our speakers touched on earlier – is the widespread cynicism in this community about the planning process for mining, and this is relevant to your role as the Independent Planning Commission.

5 We've heard that this cynicism took root as far back as the nineties, when much-loved local identity, Bob Oatley, beat Bengalla Mine three times in land and environment court, only to have the New South Wales government overturn his wins with the stroke of a pen. People today are telling us they won't bother putting in an objection, because if Bob Oatley can't beat a mine, who can? It has an impact today.  
10 Others have told us that they are reluctant to speak out, because they run a business, work in a mine or are concerned about the repercussions for family members who do. Local mine workers tell us that they often have to stay quiet about their concerns on matters like air pollution and health.

15 It's a choice between health and their job. This is relevant, as it may be giving a skewed perception of the real level of concern that exists in this community, and I can tell you first hand, it comes up in nearly every conversation you have. And also about the concern which this proponent and the department has not seen fit to properly research. Despite the very real disincentives, many hundreds of people  
20 have still taken the time to talk to us, because they want a healthy, sustainable future. The comments we make today are informed by that consultation. Let's take a hard look at the two chief reasons the department gave for recommending approval: jobs and social benefits.

25 At best, these benefits are uncertain, and we contend that they are based on faulty information. Firstly, what is a local job? For people sitting here, it's the Muswellbrook and Upper Hunter Shires. This proponent confirmed, when he arrived unannounced at our community meeting on Sunday, that his definition of local is Narrabri to Newcastle. This is not local, and we dispute the department's assessment  
30 that this represents a social benefit to our communities. The proponent also said that it aims for 80 per cent local jobs. I aim to have legs like Elle McPherson, but it's probably not going to happen. They say they will create around 70 local jobs.

We contend that it's unlikely that the highly experienced staff required for this  
35 challenging underground mine – and Peter spoke about the safety risks – we're not going to have people come from Woolworths to do these jobs. That they won't be available in our local community. And we certainly dispute the inference from the department that they will be sitting around unemployed and that this will have any impact on our relatively low 5 per cent unemployment rate for the Upper Hunter  
40 LGA identified in the last Census. The more plausible scenario here is that they will need to bring in more DIDO workers. We see the stream of traffic coming in and out of the area on shift changes, and particularly on Mondays and Fridays. Even if they do successfully poach experienced workers from other mines, the likelihood is those other mines will have to bring in more DIDO workers.

45 So, either way, it's the same result and the benefits for this community are dubious. I might point out that if we had four Hunter Belles that would actually more than make

up for the jobs that this mine proposes to create; just a thought. I'm so sorry. Can I go over, because there's a lot to say. I will try and make it quick. And there's actually some really important information to share.

5 PROF LIPMAN: Another two minutes.

MS O'CONNELL: I will be very quick. Even if these jobs exist, what guarantees do we have this inexperienced proponent can manage the safety issues that beat a far more experienced miner. We know the three deaths at this site and we know that this  
10 proponent has not prepared a safety plan. We don't want our family members, our friends and our neighbours put at risk in this mine and we have little confidence in this proponent or the prospective development partner in this matter.

We also dispute the department's characterisation of the VPAs as a significant  
15 benefit and, as one participant in our forum put it, 0.25 per cent, which is roughly what they're offering Scone Council, 0.25 per cent is an insult. What is our environment, our community and our health worth? More than that. Furthermore, we've sought independent expert advice, which we will present, which confirm that the belated SIA completed by this proponent and used by the department in its  
20 assessment report, cannot be considered as having properly assessed the social impacts and, therefore, any economic assessment of this proposal will be faulty.

Let's look at the proposal. Firstly, let's just deal with one simple matter: where is  
25 Aberdeen? When you look at the first sentence of this proponent's underground modification proposal, so neatly cut and pasted by the department in their assessment report, it looks as though it might be four and a-half kilometres from town. This is a quick grab from six maps this morning – and I'm sorry, it's really hard to see – here is the start of town. Here is their CHPP, 1.292 kilometres away. That is one of the noisiest, dustiest, most intrusive areas of this mine; that's the CHPP right there.  
30 That's where they'll be loading coal trains 24/7.

Similarly, the rest of the mine – and this is the main side of the mine. Here is  
Aberdeen – is 2.975 kilometres away. Now, we're not sure how such a simple error was made. Is this proponent unaware of the town or are they just being a bit foxy?  
35 We can only speculate, but the fact is that the department let that inaccuracy slide and it makes you wonder what else they missed. We don't believe this region can safely support another mine at this time without adverse impacts on the community, environment and other important local industries. There is clear evidence, which you've heard today, that our air shed is overburdened. Now, I'm not going to go on  
40 that, but I would like to share this video with you.

Now, this video was shot at the Bengalla, Mount Pleasant and Mount Arthur sites at  
around 7 pm at night on 27 January. The local air quality monitors at Muswellbrook and Aberdeen at that time were recording PM10 levels as high as 212 micrograms  
45 per cubic metre. We believe that's roughly four times the national standard. This was not even the worst day in January. It was the second-worst. Unfortunately, this scene is becoming all too common.

The fact is that we are already breaching New South Wales and national standards on a regular basis. We may be able to reduce droughts and other extreme weather events by taking action on climate change. We can definitely prevent the discretionary pollution that will come from this proposal. Not just the dust, but the diesel fumes and the methane emissions from the mine and the toxic diesel emissions created in transporting the coal to the port, something which this proponent and the department didn't see fit to assess.

We submit that, given the high level of pollution in the air shed it is in the public interest to deny the Dartbrook application. Related to this, participants in our consultation told us that the situation with air quality, the visible pollution in the area and their lack of faith in the EPA to regulate these impacts is impacting and affecting their perception of wellbeing and is impacting their decision about whether they and their families have a future in this area. We submit that, until the health and wellbeing impacts of existing mining are thoroughly studied and understood and unless it can be demonstrated that the impact is negligible, that it's in the public interest to hit the pause button and not approve this application.

This community is also deeply concerned about water security and Peter, in your meeting with the department, you raised the Greater Hunter Water Strategy. It's an important document and it highlights the pressure that our existing agricultural industries come under during events such as the recent millennium drought in 2006/07. The community has told us that anything that adds to this pressure is unacceptable and will increase the uncertainty for key industries, such as agriculture and tourism, some really key things to point out.

There is compelling evidence, from the Commonwealth's Bioregional Assessment Team, the CSIRO – fairly reputable folk – that the Hunter region has already experienced significant impacts to groundwater as a result of mining. It predicts that changes in water availability in the Hunter regulated river at Greta are very likely, greater than 95 per cent likely, to exceed five gigalitres per year, but very unlikely to exceed 12 gigalitres per year over the period 2013 to 2042.

Here is where it gets really interesting: that assessment was done in 2012, December 2012; that's the red line. And I'm sorry about my shaky hand, it's took much coffee today, but if you have a look you will see that the – here it is, the Dartbrook Underground Mine. You see where the green line ends? It wasn't actually part of the assessment, and if you look down the list, you will see that the open cut proposal wasn't even considered at that stage. Now, we – I thought perhaps it was a mistake, so I did check with the Bioregional Assessment Team.

They have confirmed that it was not included, so any impact from this mine reopening – and we have solid anecdotal evidence that would suggest to us that it will have an impact – will be in addition to the very concerning impacts they've already highlighted. Further, with relation to the Greater Hunter Water Strategy, you've got a proponent here that's sitting on around 2000 megalitres of water access licences. No one seems to be able to tell us whether they're high security or not,

including the proponent. We have asked. No answer. Now, if they're to re-enter the water market - - -

PROF LIPMAN: Sorry. Can you start winding up, please, Kirsty.

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MS O'CONNELL: I can. I can.

PROF LIPMAN: Thank you.

10 MS O'CONNELL: I will finish this point and wind up. So if they're to enter the market after 13 years of care and maintenance, this is going to have impacts for other water users, particularly if it's high security. 2000 megs of high security, effectively 6000 megs of general security. And to put that in perspective, the Pokolbin wine region has an allocation of just 5000 megs per annum. So – and that's supporting an  
15 iconic wine industry and a \$700 million tourism industry; they are on general security. If this user is high security and they exercise their rights and we are in a drought, then that very significant industry will be among the general security users that are cut. So their allocation will be cut prior to any mine. And there's – we will try to give you some further evidence on that anecdotal information about the local  
20 wells. A lot of people have expressed concern.

In addition to the competition for water – I'm on the very last bit – in addition to the competition for water and the impacts on water quality, there are significant pressures on our agricultural industries as a result of the existing proliferation of  
25 mining, and this additional approval will increase the uncertainty for this sector on three fronts: firstly, in terms of increased competition for land, in terms of increased competition for staff, and also in terms of increasing the climate change uncertainty that already makes our jobs as farmers so difficult. This proposal would create obvious other dis-benefits: the 24/7 train loading; the 192 B-double truck  
30 movements; the industrialisation of our visual amenity; the impact on local property values in Aberdeen; the impact on surrounding landowners who will be displaced and on community connectedness.

On balance, we don't believe that the benefits of this mine are in any way equivalent  
35 to the significant dis-benefits of this proposal, or that this proposal is financially viable in its own right. In other words, without the future open cut. Furthermore, history tells us that this community's concerns about the fear that the restart of underground mining at this site will pave the way for open cut may be justified. They've expressed to us that that would be totally unacceptable. What we're asking  
40 you to do, in the context of the legislation, is not to give this proponent a blank cheque, and that's what they're asking for. They don't want to hand back their six million tonnes. They don't want to give certainty and they've got numerous plans that are already – that are not done; greater than 12, we believe.

45 PROF LIPMAN: Thank you, Kirsty. I think we're going to have to wind it up there.

MS O'CONNELL: Okay. Thank you.

PROF LIPMAN: If you do have a lot more information for us - - -

5 MS O'CONNELL: There is.

PROF LIPMAN: - - - we're very happy to receive it and put it on our website for everyone to look at.

10 MS O'CONNELL: Brilliant. And we will. And we will. So in closing, we ask you to deny this application, and thank you for your time.

PROF LIPMAN: Thank you. Sara Bice, please.

15 MS S. BICE: Is Sara Bice here?

MR JAMES: We will be playing video provided by Sara.

20 PROF LIPMAN: Right. Right. Maybe we should go onto the next speaker and then have – or do you want to have the video now?

MR JAMES: I think we will have the video now. It's ready.

25 PROF LIPMAN: Okay. If it's ready.

MS S. BICE: Hi. I'm Associate Professor Sara Bice, and I've been commissioned by Friends of the Upper Hunter to provide an independent, expert review of the social impact assessment for the Dartbrook Mine Modification 7 Kayuga seam bord and pillar application. My views here are my own and do not represent the view of my employer or any organisation with which I have a formal affiliation. While my views are my own, it's important to understand the credentials that I bring to this review.

35 I've completed social impact assessments in regional, remote and Indigenous Australia, Papua New Guinea, Fiji and West Africa. My award-winning research focuses on best-practice impact assessment, social licence to operate and corporate social responsibility. I've served in leadership roles through the impact assessment profession at a global level, and in 2011, I co-designed and facilitated the inaugural Upper Hunter Mining Dialogue.

40 The aim of this review is to provide an independent assessment of the SIA as compared to global best-practice guidance. In particular, I looked at the recent New South Wales Department of Environment and Planning SIA guideline, the International Association for Impact Assessment, IAIA, 2015 social impact assessment guidance and the 2003 IAIA principles for SIA. Combined, these documents provide a clear evidence base about what communities and governments should look for in SIAs that go beyond box-ticking or minimum standards to achieve

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SIA's primary goal: to bring about a more ecologically, socioculturally and economically sustainable and equitable environment. Impact assessment, when performed to best practice, promotes community development and empowerment. It builds capacity, and it develops social capital.

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Unfortunately, the SIA provided here cannot deliver the types of evidence or insights necessary to support evidence-based decision-making due to several reasons. First, the SIA is based on a very problematical assumption: that the reopening and re-licensing of the Dartbrook Mine represents a minimal or no-change scenario for local communities and the region.

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This assumption is critical as it underpins the SIA's scoping, its depth and breadth of stakeholder engagement and the issues prioritised in the assessment. This assumption can best be described as faulty. It's difficult to understand how the reopening and modification of a mine that has, effectively, been closed for 13 years can be interpreted as a minimal change requiring only a bare minimum SIA.

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Secondly, the SIA wasn't integrated into the EIA as per best practice. Instead, the SIA was delivered at the request of DPE and only post hoc. This meant that community members were unable to provide any input into the assessment as the exhibition period had closed. And, finally, the SIA fails to address priority community concerns and interests, as expressed in submissions and in local and regional community plans and strategies. Best practice SIA, as per the DPE's own guidelines, recommends that:

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*Any relevant social trends or social-change processes being experienced by communities near the project site and within the surrounding region be considered.*

Clearly, the Upper Hunter region's shift away from coal, recent judgments regarding other local operations and the fundamental changes in the community vision that have occurred during the past 13 years have not been accounted for here. This results in a fundamentally flawed SIA. In summary, my review finds that on the basis of these problematical assumptions and limited consideration of best practice, the scoping of the SIA was poor.

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As per the DPE's guidelines, scoping is used to focus the SIA on the most relevant and important issues for each project and ensures that the scale of the assessment required is proportionate to the importance of those expected impacts. That didn't happen here, and it means that any cost-benefit analyses or related decisions based on the SIA are unreliable as they are based on an incomplete understanding of the current situation.

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And I should note, as an impact professional myself, this shouldn't reflect poorly on the assessor. An assessor can only deliver an assessment within the scope defined and resourced by her client. Importantly, the stakeholder engagement completed for

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the SIA is really at a minimum, and it doesn't meet the aims or the intention of the EP and A Act, especially section 1.3(j), which is:

5                   *...to provide increased opportunity for community participation in environmental planning and assessment.*

The majority of engagement here appears to have occurred primarily via informed methods, such as community newsletters. No publicly advertised consultation beyond the mandatory EIS display conducted by the DPE appears to have occurred, and the EIS display didn't include the SIA as it was delivered post hoc. It's therefore inappropriate to include that a lack of response to such informed methods of engagement indicates a lack of community concern. Lack of response cannot serve as a proxy for community consent to the proposal. Moreover, the limited engagement here means that issues prioritised in the SIA, for example, local labour force, do not appear to reflect the actual priority community needs or interests, as expressed elsewhere in submissions and local and regional strategies.

The SIA also fails to consider intra- and intergenerational equity and the strong agricultural identity and heritage of the Upper Hunter. It fails to consider social trends and changes in local communities and the region, including regional strategies and community plans for a move away from coalmining towards more sustainable and environmentally friendly industries. A February 2019 judgment in the New South Wales Land and Environment Court refusing the opening of a coalmine near Gloucester was taken primarily on social impact and climate-change grounds. This judgment reflects changing local and national sentiment, which must be considered to gain a clear understanding of the current social context and potential social impacts of the proposed Dartbrook Mine Modification 7 application.

The SIA also uses selective evidence. This use of selective sources and figures without context, combined with very limited stakeholder engagement, harms the reliability of arguments presented to support the application. For instance, the SIAs response to submissions' concerns about climate change suggest that the need for coal exports is "difficult to argue against". This is disingenuous. As the report itself states, different stakeholders may cite different sources. The sources cited in the SIA are one-sided, and they include groups known for climate-change denialist stances and junk science.

Substantial, peer-reviewed and very reliable counterevidence suggests that global coal consumption will go into reverse by the early 2020s, even as early as next year. Global coal demand declined in three of the past four years to 2018, and in 2017, for the first time ever, global coal demand was projected to remain flat until 2020. And 2020 demand is now estimated to be one billion tonnes coal equivalent lower than 2013 predictions. 36 governments and 28 major firms worldwide are now committed to phasing out coal from their power sectors by 2030. Major markets for Australian coal, including China and India, are already curbing their coal use, and leading economists state that there is:

*...a negative long-term outlook for coal and a lot of uncertainty.*

Overall, then, the findings of this SIA are not a reliable depiction of current research evidence or of community perceptions of, or concerns about, the proposed Dartbrook Mine reopening and modification. In order to more reliably reflect current community interests, a social impact assessment for this project would involve appropriate scoping and a scoping report; engagement of a broader range of stakeholders; more meaningful and robust engagement methods; consideration of linked, cumulative impacts; fairer and more robust engagement of research evidence, especially regarding the coal industry and climate change; and an exploration of community trends and change processes, including communities' future visions and concerns about climate change.

At worst, APCs apparent lack of genuine concern for or investment in appropriate impact assessment should be of concern to the government. At best, APCs lack of understanding the best practice social impact assessment, its values and importance should be of concern to the government. It is my firm view that this SIA does not provide substantial or substantive information on which to make a truly informed decision about the application. Details are available in my accompanying report. Thank you.

PROF LIPMAN: Right. We will have one more speaker before the break. Natalie Vella. Is Natalie here?

MS N. VELLA: Good afternoon. I want to start by recognising the traditional owners and custodians of the land we meet on today and pay my respect to elders past, present and emerging. I'm a solicitor at EDO New South Wales and we act for the friends of the Upper Hunter. We've been requested to make a submission today in light of the recent decision of the Chief Judge of the New South Wales Land and Environment Court in Gloucester Resources Limited v Minister for Planning, which I will refer to as the Rocky Hill decision. We note that we will provide a more written submission to the IPC in due course.

Our client submits that the Rocky Hill decision requires close scrutiny by the IPC as a number of the circumstances of the Rocky Hill Coalmine Project and the Dartbrook modification are similar, particularly in relation to social and climate change impacts. In relation to climate change impacts of the Rocky Hill Coalmine Project, the court accepted Professor Will Steffen's expert opinion and found that the direct and indirect greenhouse gas emissions of the Rocky Hill Coal Project will contribute cumulatively to the global total greenhouse gas emissions.

Professor Steffen educed a view which was accepted on the carbon budget which limits the cumulative amount of the total additional carbon dioxide emission that are allowed, consistent with the 1.5 to two degree global temperature rise target agreed in the Paris Agreement. The chief judge of the Land and Environment Court, Preston J, stated that:

*The best approach to evaluate the merits of the development to be determined was considering greenhouse gas emissions, their contribution to climate change and its consequences as well as other impacts in absolutely or relative terms.*

5

As a result, the court concluded that the Rocky Hill Coal Project's poor environmental and social performance in relative terms justified its refusal and that included the greenhouse gas emissions of the Rocky Hill project and their likely contribution to adverse impacts of the climate system, environment and people. The department states that the Dartbrook modification does not involve an alteration to the size of the approved coal reserves or the production range. Accordingly, the modification would not significantly increase allowable greenhouse gas emissions.

10

While this is technically factually correct, with respect our client submits that it fails to consider that the modification seeks a five-year extension, and accordingly emissions will partly relate to a new time period outside of what was originally considered and approved. This is important because, as the Rocky Hill decision highlights, the scientific evidence relating to climate change impacts and the judicial approach to causation has significantly evolved since the time of the original approval in 2001.

15

20

Further, we note that the applicant has not quantified scope through indirect emission at all and did not separately quantify direct emissions for the five year extension period. Further, the calculations that were done in relation to direct emissions are based in the assumption of 1 million tonnes per annum, not the approved 6 million tonnes per annum, resulting in a significant underestimation of direct emissions.

25

Our client respectfully submits that the IPC should consider the indirect and direct emissions relating to the five year extension period separately in the context of the global carbon budget and adopt the assessment approach of Chief Judge Preston set out in the Rocky Hill decision. Justice Preston assessed the Rocky Hill Coalmine's social impacts using the Department of Planning and Environment's 2017 Social Impact Assessment Guidelines. A social impact assessment for the modification was prepared. It does not separately address the nine categories of potential social impact identified in the guideline and considered in the Rocky Hill decision. Some categories were not addressed at all, and some were not adequately addressed. I will now briefly discuss these.

30

35

The social impact assessment refers to potential economic impacts of the industries but does not have regard to land use trends and likely preferred uses of land in the vicinity of the development. Further, the social impact assessment fails to clearly identify the fact that the objectives of both the applicable local environmental plans make no mention of mining and instead both focus on protection and conservation of agricultural land. There is no consideration of the objectives of the RU1 primary production zoning under the Muswellbrook local environmental plan which applies to the land were the proposed new shaft will be located.

40

45

Our client respectfully submits that a consideration of the likely preferred uses is particularly relevant to the Dartbrook modification given the significant period of time since the consent was granted in 2001 and the extended period that the mine has not been operational. Potential impacts on water resources were raised as a concern by many objectors. There is no consideration in the social impact assessment of the perception of the community on how the Dartbrook modification will impact upon water resources.

Further, the assessment of groundwater impacts only considers the proposed bord and pillar mining of the Kayuga coal seam rather than the cumulative impacts of what is approved and proposed. In the Rocky Hill decision, Preston J held that although noise impacts and air quality levels would comply with the relevant non-discretionary development stands in the mining ..... this did not preclude consideration of the social impacts of the mine's noise and air impacts on health.

Although concerns re noise and air quality are referred to in the social impact assessment, they are not considered in terms of social impact and the perception of nearby residents; rather, reference was simply made to applicable standards. We also note that fears and aspirations of the community were not addressed in the social impact assessment, and consideration of impact to the community and the social impact assessment was limited to addressing changes in population and economic impact only.

The above analysis of the Dartbrook modification in light of the Rocky Hill decision suggests that there is significant uncertainty regarding the impacts of the Dartbrook modification. Accordingly, in our client's view, the IPC cannot be satisfied on the basis of the information available to it that the risks and impacts of the modification can be effectively mitigated by the conditions of any consent, such that approval of the modification is in the public interest. As such, our client respectfully submits the IPC should determine the modification application by refusing to grant consent. Thank you.

PROF LIPMAN: Thank you Natalie. We will break for 10 minutes and recommence after that.

**RECORDING SUSPENDED**

**[3.24 pm]**

**RECORDING RESUMED**

**[3.39 pm]**

PROF LIPMAN: If you could please come back in, I think it's time to recommence the afternoon session – the final session. Are you Trevor Woods?

MR .....: No. John Hayes.

MR J. HAYES: John Hayes is my name.

PROF LIPMAN: Sorry?

5 MR .....: John Hayes. John Hayes.

PROF LIPMAN: John Hayes. Right. Right. All right. No. No. It's fine. You  
can – I don't – I'm just checking if Trevor Woods is here because he was supposed  
to be here as well. I was looking for Trevor Woods as well but you can certainly  
10 speak now. Our first speaker is John Hayes.

MR HAYES: Thank you, commissioners. I'm putting on my grandfather's hat.  
I've got nine grandchildren under nine and guess what? Dartbrook doesn't have a  
social licence to reopen here for my grandchildren without a voice or anybody else's  
15 grandchildren without a voice. The last two speakers clearly demonstrated – the  
professor on the video and the solicitor from the Environmental Defenders Office –  
clearly indicated failure of process and lack of social licence. I fully endorse what  
they say but I would emphasise no social licence for grandchildren. I'm 73 and I'm  
really worried about what the planet will look like when they are 73. For the eldest,  
20 that will be in 2084 and, for the youngest, 2091. I wonder whether other people in  
the room have grandchildren and whether they're worried about what the planet will  
look like when their grandchildren are 73.

We need to change. All of us. None of us can continue ripping up good farmlands,  
25 exploiting water, leaving wastelands in the way we're doing it now. The mines  
around Dartbrook and the Hunter are shocking examples of this. Growth,  
development and technology have caused global warming, climate change, pollution,  
toxic residues, waste and spoilt stockpiles and they leave us all to cough and to  
wheeze, for our eyes to water and to have skin rashes, and we know better. Coal is  
30 obsolete. Tim Buckley, who is an authority with an international reputation on coal,  
said peak coal came through in 2013. You've heard from other speakers about the  
diminution of demand, the introduction of renewables and all of those things, so  
they're matters to be taken into account.

35 Dust and air pollutants are harmful to human health and cause allergies, illness and  
death. Solar and wind technology are rapidly replacing fossil fuel. Technology  
enables removing coal and products made using coal from building material,  
structure and cars. There needs to be a just transition away from coal, and refusing  
the failed Dartbrook Mine new application should be part of this transition. How  
40 will it work? Government, planners and industry must embrace the new technologies  
coming forward and give our children and grandchildren the time, space and support  
to develop them. Some examples include renewable energy, electric transportation,  
smart houses and offices.

45 Commissioners, respectfully, can I suggest that you need to realise that allowing a  
failed coal mine to reopen in a productive valley does not contribute to a functioning  
transition. Coal mines are done and dusted. The world is moving on. For the sake

of my grandchildren, your grandchildren and the world's grandchildren, please acknowledge that the future is almost upon us. The reopening of this failed mine cannot help future generations in Australia, so it's time for the planners to join the new age. My grandchildren and all our grandchildren call on you three  
5 commissioners, please, reject the application. Now, I will take off my grandfather's hat, and another hat that I wear is as convener for correct planning and consultation for Mayfield Group based in Newcastle. I spent 15 years in Newcastle.

10 I've been very active within the community. Our group was formed nine years ago following a series of huge public meetings in 2010. We've got a membership of about 500 people, and we're concerned about poor planning and poor consultation. Two things that you've heard about from other speakers today: poor planning and poor consultation. We're a major player in the campaign for responsible cartage of coal by rail to the port of Newcastle. I'm sure you know and I'm sure many in the  
15 audience would know that Newcastle is the largest coal export port in the world. Clean air, clean water courses, clean aquifers, low noise and safety, they're the touchstones of responsible coal haulage. This mine proposal does not explain how unwashed coal will be hauled responsibly.

20 In fact, it doesn't say anything how things are going to be responsibly in terms of the coal haulage. It doesn't explain the impacts on the Lower Hunter and the people of Newcastle. I bet you can't find in the application how the coal will be transported responsibly. Coal trains pollute, and you will see from the slides there – I'm sorry. The bottom one is cut off, and you're looking at the door a bit. Working from the  
25 top, locos, they're not environmentally friendly. Tracks are littered with coal when you travel up and down. Have a look, on the wagons have carry-back coal both inside and outside. I'm sorry. Those two bottom photographs are cut off. Carry-back coal remains in wagons after they unloaded, and it escapes via doors that are not sealed. It's sucked the top by the Venturi effect, and it drops from the  
30 undercarriage.

Falling coals and spills generally prior to the train reaching the main line from the top of the load, the train platforms, the wagon exterior and train mishaps. Water damage is when wet coals drains excessive moisture from loaded wagons due to cold  
35 water applications and due to rain. You may know that coal wagons are not tight sealed at the bottom. Faulty research outcomes and lack of prosecutions. The formal research to identify coal train losses has been very problematic. I and some of my colleagues in Newcastle have done our own citizen science, and we've produced those results to the chief scientist of New South Wales, the EPA, ARTC and other  
40 bodies. The lack of sound research, however, results – and has been a factor in the lack of prosecutions by the EPA, by planning and by rail operators.

Where is the Dartbrook Mine proposal evidence to show that their trains are different from all the others? Six train movements a day, that doesn't sound like a lot. That's  
45 three loaded and three unloaded, but it multiplies out. 2083 trains per annum which is made up of 166,667 wagons, all with 90 tonne loads, and 8760 diesel locos. Unquestionably, it's a major cumulative impact in Newcastle, and this application by

the proponent totally ignores cumulative impacts. I submit, commissioners, that you cannot ignore cumulative impacts. We will have over the predicted life of the mine, without the open cut which is looming big on the horizon, nearly three million wagons choking the corridor or the port over the mine's life, and if the open cut proceedings, those numbers will treble. Just some stats about PM2 and PM2.5.

Some in the room will know all about that. Those that don't – that's the very fine stuff that you suck in. 10 is about the size of a human hair. 2.5 you can hardly see. They're the ones that kill you. You suck it in, your body can't handle it, you die. I don't know whether you've ever heard from Ben Ewald yet, but if you haven't, he will give you the stats on death from this sort of stuff. Through the port at Newcastle 170 million tonnes of coal is exported each year, and on our calculations with stuff that comes out of the wagons and converts to PM2.5 dust which is tiny that's the equivalent of four full coal wagons, and it's also the equivalent of 16 full coal wagons of PM10 dust, the dust that's as tiny – smaller than your hair, a strand of your hair. It goes into the air and water courses. It attacks the health of all children, you, me, our dogs, cats, fish, the total environment. Do we really want the reopening of a failed Dartbrook Mine?

Nil consultation which is consistent with how the governments of New South Wales treat us with contempt. 130 residents and 30 doctors wrote to the Environment Minister Upton. She's no longer in the job. And Health Minister Hazzard asking them to discuss worsening air quality from expanding coal mines. This was halfway through last year. They refused to meet us. They referred it to a committee, and responsible ministers are still not listening. That's typical of hundreds of consultation requests and subsequent refusals. Locations most impacted. Consistent high volume photographic evidence clearly indicates that the major coal – I'm nearly finished – major coal train losses are from unloaded wagons within about 30 Ks of the port. Some minor losses occurs within five Ks of the port. Who is calculating the cumulative dust? I don't think anybody is, and the people around Newcastle are wearing big doses of it.

Approval for the Dartbrook Mine should be withheld because no assessment has been made on the city and the port of Newcastle of the coal trains from this mine. There's some interesting statistical stuff there. I won't take you through that, but I'm very happy to make myself available later on to the commissioners if they want more information on those. But you will see on the right-hand column coal lost in tonnes from the wagons that come down our valley is 6514 tonnes a year, an amazing amount. We have some proposals about how a lot of that can be cleaned up. There should be certification before the wagons are even allowed to enter the main line. And two things: firstly, I want to thank you on behalf of my grandchildren and our grandchildren for listening to us. Pope Francis had a bit to say about this when he released in 2015 his Care for the Common Earth encyclical. He says:

*We know that technology based on the use of highly polluting fossil fuels, especially coal, but also oil and to a lesser degree gas, needs to be progressively replaced without delay.*

And can I just conclude by showing you two things that were given to me yesterday: Anglo Coal Dartbrook Annual Environmental Management Report 2004, Annual Environment Management Report 2003. The community has done its homework. I suspect that nobody has given you, the commissioners, the material out of here.

5 There's very, very comprehensive material in here which demonstrates why the old Dartbrook Mine failed. There's no evidence in the new application to say that the new proponent can deal with any of the problems that were identified back in these volumes, and if you or staff want more details about that, I'm happy to help. Thank you.

10 PROF LIPMAN: John, if you want to leave any – or if you can spare any copy of these, we would be happy if the Secretariat - - -

MR HAYES: I don't think my life would be worth it if I gave it to public servants or anybody paid by the government. I will give you the title. You guys can do your own research. The fellow that gave it to me he would slit my throat if I told him I had handed it over to the PAC hearing today.

PROF LIPMAN: All right. Thank you. Is Trevor Woods here – Trevor Woods?

20 No. Right.

MR .....: No, he is.

PROF LIPMAN: Yes.

25

MR T. WOODS: Good afternoon, people, commissioners. Thanks for allowing me to speak today. I'm going to speak – and I will probably be howled down for what I'm going to say to you now – on opening Dartbrook – approving it to reopen. Everybody that spoke today has spoken well on their concerns. Some of them have got nothing to do whatsoever with the proposal that you're all supposed to be looking at. The dust quality from other operations has got nothing to do with Dartbrook whatsoever. Water issues: that can be managed. It was managed when it was an operating mine. It's still being managed. The problem I can see from this today people don't want coal, "I don't want coal mining."

30

35

Let's be honest. Have a look around the room, people. Have a look around the room that you use at your own house and travelling day in/day out. All the materials you use coal is part of it. It is a matter of fact in the manufacturing of just about everything we use today. Our dear doctor friend up here, the local GP Stone spoke about this. The medicine he asks people to use has got products made from coal in it. So what do we do if we don't have coal mining? Come up with a solution to phase it out of everything. You just can't at the moment. Maybe in 30 years or 40 years or 50 years, yes, you may be able to do it. At the moment you cannot do it.

40

45 People are saying use solar power, wind power. How is that made? How is the equipment manufactured? 50 per cent of most of that equipment has got some product from coal in it. Your plastics, your insulation, etcetera. So how do you



5 make the product? You can't. You can't convert from one power source to another without mining. People here today, microphone, computers on the table here – this one here probably 50 per cent of that has got products in it from coal. The rest of it will be from some other form of mining, copper, lead, zinc, gold. Your mobile phones that everybody is running around using has all got properties from coal in it.

10 So to me allow Dartbrook to go ahead, create employment for the community. The mines create better training for everybody. They train engineers, chemists, managers. A lot of the property owners out here, a lot of the horse stud owners, will disagree with me on this. What training do you offer? What apprenticeships, scholarships and that do you offer? Virtually nil.

15 To me, the one – one thing I would like, if you do decide to go ahead and allow Dartbrook to go on, because a lot of you people – I think, Peter, that spoke earlier about underground mining – knows about what I'm talking about. Board and pillar extraction is part of setting up a longwall. You've got to drive your headings first before you set the wall up. The problem they run in at Dartbrook, one of the seams parted, so the longwall equipment, especially the hydraulic chocks that hold the roof up that Peter was talking about, would not close down small enough to go into the –  
20 up into that seam.

25 You don't run down to the local hardware shop or engineering shop and order longwall line equipment. It has got to be manufactured. It has got to be built to specification. It has got to be built to fit the size of the seam. Some of those things have got to be ordered five years in advance, the same as the tyres for these big dump trucks. Those mining people do not run down to the local tyre service and get a dump truck tyre. They order them two years in advance. They've got to estimate how many tyres they're going to go through and then put in orders.

30 One thing I will ask you to do, commissioners, is that some of the submissions that were put in here today is to reject them completely for the simple reason they had nothing to do with the criteria that you're here to look at, which is changing the application from a longwall mine back to a board and pillar mine. Everybody that spoke here today about dust from other mining operations, has got nothing to do with  
35 Dartbrook. I'm asking you reject those submissions wholly; they were not called for and should not have been put into this forum. This forum was here for a specific reason, to find out whether you're going to allow the operation to go back from a longwall mine back to board and pillar. I suggest you go and see what a board and pillar mine looks like and how it's operated.

40 Mr Hodges did say about monitoring. The new underground mining equipment for board and pillar mining or any mining has got a lot of monitoring on it. If they detect gas, the machines automatically shut down. The power is automatically shut off to that area until such times as they get enough ventilation through there to dilute the  
45 gas and remove it. So the chances of having problems with that are minimal, because those pieces of equipment are sealed, they cannot be overridden. All right.

5 So you need to look seriously at that. Look at what the criteria was and the application was put in for. Look at taking it from a longwall mine back to a board and pillar mine. Please do not use submissions given here today or you received on a computer or in a letter that do anything with asking you to look at another operation, because that is not what this is about. Thank you.

PROF LIPMAN: Thank you, Trevor. Cameron Collins, please.

10 DR C. COLLINS: Good afternoon, commissioners. We're on the home stretch. We're nearly there. Thank you for your time. Before I start, the Hunter Thoroughbred Breeders Association acknowledges the traditional owners of the land on which we meet, it's leaders, past, present and emerging. As you know, my name is Cameron Collins. I'm a veterinarian with 20 years experience in equine reproductive practice in the Hunter Valley and internationally. I'm the managing  
15 director the Scone Equine Hospital, a member of the Australian and New Zealand College of Veterinary Scientists and a president of the Hunter Thoroughbred Breeders Association.

20 It is as the president of the Hunter Thoroughbred Breeders that I speak to you today. I would like to explain what we do and why this proposal is relevant to our industry, and I would like to invite you to come and visit some of our farms and businesses to help you understand the scale of the industry and its importance to the region. The HTBA represents some 200 organisations and many individuals who make their living from breeding horses in the valley.

25 In fact, were it not the case that the premier yearling sale of the year, the place where we offer our best horses to the cream of the Australian racing industry and to our international buyers is on in Sydney today, I expect we would have filled this room two or three times over with people who support our position on this point. We have  
30 a 200 year history of sustainable farming in the Hunter and our business is producing the world's best equine athletes.

35 It is, therefore, with great concern that I appear here before you once again to fight to preserve and protect the Hunter Valley's equine-critical industry cluster. We understand the part that mining has played in the economic development of the Hunter Region, but we also understand that times are changing and that sustainable industries, agricultural industries like ours, are the future of this region and that destructive and short-term projects, such as this one, with significant disadvantages to the community, should not be approved at the expense of those sustainable  
40 industries.

45 The Hunter's multibillion dollar breeding industry is the largest in Australia and the second-largest in the world. It is considered one of three centres of excellence of thoroughbred breeding, alongside Kentucky in the USA, and Newmarket in the United Kingdom. It is Australia's largest producer, supplier, and exporter of premium thoroughbreds. One in every two thoroughbreds born in Australia are born in the Upper Hunter. 80 to 90 per cent of the catalogue of horses auctioned at

yearling sales around the country every year are the progeny of Hunter Stallions. 80  
to 90 per cent of Australia's thoroughbred exports are the progeny of Hunter  
Stallions. Some 50 per cent of the races along the eastern seaboard on any typical  
racing day are the progeny, or contain the progeny of Hunter Stallions.

5

Our industry is world recognised and world renowned. It is interconnected,  
vertically integrated and concentrated in a critical mass in the Hunter Valley. As a  
result, it has been recognised by the New South Wales State Government and has  
been declared a critical industry cluster and of national significance. The industry is  
10 fundamentally based on the value, performance and reputation of our stallions, their  
progeny and, critically, the environment in which they are bred and reared. Our  
industry makes an annual contribution to the Hunter Region of 565 million, to the  
state of 2.6 billion, and to the national economy of around five billion. The industry  
is the largest agricultural employer in the region with round 5000 direct jobs. It  
15 produces 53,000 jobs related to it in the state and around 250,000 jobs related to it  
across the nation. Our industry produces athletes for the entire county.

Racing is one of Australia's oldest sports. It had its origins in 1810, when Governor  
Macquarie held the first race meeting in Hyde Park. It remains the second-most  
20 popular sport in Australia, behind AFL and attracts over two million attendances  
every year. It is part of the fabric of the communities across the country and, in New  
South Wales alone, there are 135 race clubs. The thoroughbred industry is a  
substantial and important agricultural industry. Its contribution to the economy of  
this region is twice the value of irrigated agriculture, four and a half times the value  
25 of dairy and 10 times the value of beef cattle; it's a significant agricultural industry.

So that's us. Why are we concerned about this project? We firmly believe that this  
project does not make economic or environmental sense. It is not in the public  
interest and it should be rejected. If I can start with the proponent's environmental  
30 assessment report, and the diagram here is from AQC's main environmental  
assessment report, it clearly shows the outline – and we will provide these documents  
to you later. You already have them – that the equine critical industry cluster and  
bio-strategic agricultural lands are contained within the project boundary. So the  
yellow and the green represent BSAL and critical industry cluster.

35

In spite of this, the social impact assessment which AQC undertook after the  
exhibition period was exhausted, does not mention, nor analyse, the impact of the  
proposal in terms of these two considerations. If, as the department finds, on page 27  
40 of its assessment report, the social impacts experienced are more akin to a new mine  
opening, then why was the impact of this proposal on the map and legislated CIC and  
BSAL land not properly assessed? The assessment is silent on the effects of air  
quality, noise and blasting, water subsidence, visual impacts and human health with  
regard to our industry and to the equine CIC and the bio-strategic agricultural land.

45 In our opinion, the proponents' social impact assessment is perfunctory and  
tokenistic at best. And we've heard a lot of detail about the quality of that social  
impact assessment, so I won't go into that. Commissioners, HTBA is not anti-

mining. We recognise the role the mining industry has played in the Hunter and New South Wales economy. We approach every mining project that affects us dispassionately and scientifically. And we engage scientific experts to assess it on our behalf and to assess it on its merits. You will hear today from my HTBA  
5 colleagues and a number of experts that this proposal does not make economic or environmental sense.

It is not in the public interest and it should be rejected. Before you make your decision on a project of such importance to our industry, I would strongly urge you  
10 to come and visit us, to see what we do to meet people in our industry and to understand the scale and complexity of what we do. We are passionate and protective of our industry, the role it has played in the heritage and history and development of this region, and we are proud of the creation and maintenance of  
15 long-term, sustainable jobs that go with it. We're also proud of community cohesion and the sense of place we have. We know who we are. We're the horse capital of Australia and we think that's something to protect. Commissioners, I will now hand over to Helen Georgopoulos, who is the Hunter's director of policy, to continue this presentation. Thank you.

20 PROF LIPMAN: Thank you, Cameron. Excuse me. Before you start, Helen, I understand that Peter Stephenson won't be talking, but you will be taking in aspects of Peter's speech today.

25 MS H. GEORGOPOULOS: That's correct. Yes. That's correct, Commissioner. I will do the best I can to encapsulate what Dr Stephenson has said, in terms of air quality. And obviously we will make his full report available to you within the week.

30 PROF LIPMAN: Thank you.

35 MS GEORGOPOULOS: So I too acknowledge the traditional owners on whose land we meet today and their leaders past, present and emerging. My name is Helen Georgopoulos. I am the policy director for the Hunter Thoroughbred Breeders and I have been the policy director for the past 10 years. I want to continue Cameron's  
40 presentation and just comment on a number of things that are of importance to us as an industry and as a community organisation, if you like, who have had a proud history of living here around 200 years. We do look at these things very clinically and very scientifically and technically. So what do we know about Dartbrook: well, we know that there have been five owners of the site from exploration to now. We know that the open-cut proposal was socially, environmentally and economically unworkable.

45 We know that underground was the social, environmental and economic compromise. We know that over the past 28 years, the Dartbrook Mine has been inoperational more than it has operated, 16 years to 12. We know that more experienced miners, including Shell and Anglo, could not make this mine work. And we know that the development approvals or modifications to shift from the Wynn

seam to the Kayuga seam, because of difficult mining operations and conditions, were experienced again in the Kayuga seam, when those operations were shifted. What do we know about AQC, the Australian-Pacific coal company: well, we know that they have, to the best of our knowledge, no prior mining experience. We know  
5 that the joint venture that they were expecting to complete by the first quarter of this year, to bring some of the technical expertise they needed, has not been agreed. And we cannot, as of today, assume that it will be. We therefore must question, as we stand here today, is AQC technically competent within the meaning of the Mining Act to operate this mine.

10 We will have a series of experts who have looked at economics, air quality, water, visual impacts, noise and heritage to appear before you, to look at each of these issues. And what I can tell you at a very high level is what we know is that there is no economic justification for this mine. It is not viable as a standalone project, by  
15 the admission of the proponent in their JORC report. As per usual, the economics that underpins the justification for the proponent overestimates the public benefits, underestimates the public costs. We know that the environmental costs are too high. We know that the impacts on our industry have been entirely ignored. We know that no cumulative costs have been assessed. And we know, with certainty and with  
20 considerable caution, that the social benefits will be negative and that the project will result in a net loss to both New South Wales and the Australian economy.

In summary, we know that this will not be in the public interest. And what about air quality. Well, we've heard so much about that here today. We know that the Hunter  
25 Valley has the worst air quality in New South Wales and that's something we shouldn't be proud of. We know that there have – and I will correct a typo. Sorry. I thought it was picked up – 209, not 290, exceedances so far this year, PM2.10. We know that the exceedances in air quality are at times five to 10 times above what is considered safe. We know that 192 coal truck movements a day, five days a week, is  
30 only going to add to this situation, which is unacceptable for our environment, unacceptable for our community and unacceptable for our industry.

I will try and do justice to Professor Stephenson's air quality assessment. So he has found – and we will submit this to you – that air-quality assessment that he has  
35 undertaken identifies that the background derived from 2014 data, air quality PM2.5 and PM10 is close to or exceeding NEPM criteria. He finds that current air-quality data indicates that the actual background is higher. He finds that not all dust sources have been included in the modelling. He finds that the cumulative impacts are underestimated and already demonstrate exceedances of criteria. He finds that the  
40 proposed mine will increase the scale and extent of NEPM unacceptable impacts. He finds it will add to air quality impacts and will project those impacts northward into areas currently unaffected by mining. The focus of the proponent's assessment and, indeed, DPEs report is whether air quality triggers voluntary acquisition criteria at non-mine-own residences.

45 Professor Stephenson finds that this does not give adequate weight to the fact that air quality criteria will, as a consequence of this mine, be exceeded over a large area of

land. He also finds that it does not take into account the social impacts on the community of decreased air quality and that the air quality assessment does not include greenhouse gas emissions scope 1, scope 2 or scope 3. Commissioners, we would like to stress this point – and to us this is an important point – the Hunter Tunnel was integral to the original approval of this development – the original development approval. Both in 1991 and in 2001, it has been through two commissions of inquiry and it was found and accepted by the proponent that coal road haulage was environmentally dangerous, intrusive and socially unacceptable. And this finding has been recognised in numerous further modifications by the department.

So what has changed? Why has this been ignored? Well, more mines have come on stream, the Hunter air quality has worsened, the community is more sensitive to mining today, the proponent has admitted that they want a capital light approval. And what we're saying is that this modification is therefore not a minor change to the original DA, as indeed Robson J found in the case of ..... Proprietary Limited v The Minister for Planning. What do we know about noise and blasting: well, the assessment is flawed. There's no understanding of existing ambient noise in the area. Blasting is expected, yet the impacts have not been assessed. Noise limits curiously at this mine, which is the underground mine, are higher than the adjoining Mount Pleasant Mine, up to six decibels.

We know that there has been no cumulative noise impact analysis and we know that the noise intrusiveness is likely to be 15 to 20 decibels higher than ambient background noise levels at Kayuga. And we also know that the noise model that has been used uses outdated software, software that can't be purchased by anyone and can't be interrogated by us, by the department or, indeed, by yourselves. Water analysis: our industry and many agricultural industries – for our industry water is the lifeblood, particularly important in times of drought. And what we will hear from our water expert is that the analysis presented by AQC does not do justice to the seriousness of understanding the impact of this proposal on water quality, quantity and balance. There is no risk analysis, there's no understanding of the aquifer interference policy, and out of sight is out of mind; we know that once the damage is done it could be irreversible.

Heritage completely ignored. We have a rich indigenous and European heritage in the Hunter Valley. We have items such as significant Aboriginal song lines, we have travel routes and ceremonial places, and that picture is of a Bora ceremony, and Mr Tim Owen will speak a little bit more about that. We have a rich European history with houses like Riverview and the Kayuga Homestead, the McIntyre, Kayuga and Dartbrook Cemeteries. None of these have been assessed in terms of this modification. And the cultural significance that has been recognised by previous PACs has been entirely ignored by the proponent and, indeed, the department.

Visual: again, I touch on the Hunter Tunnel. We know that a fundamental principle – a core element of the original DA – was that the Hunter Tunnel was the Hunter Tunnel, and this has been set aside, as have the environmental and visual impacts and

the intrusiveness of road haulage in this proposed modification. The visual impacts, whether they're static, dynamic, direct or indirect, of coal truck haulage and above-ground infrastructure associated with this proposal from transport corridors, the town of Aberdeen, nearby residents, has been ignored. The visual impact of B-double tracks continually crossing the flood plain every 3.5 minutes has been disregarded, as have the consequences of dust, noise and light pollution, and the impacts on the region's investment and potential tourism attractiveness.

What does this mean for our industry? Five PACs, two gateway panels have found that our industry, in close proximity to mining, is an incompatible land use. The PAC in 2015 recommended appropriate buffers, exclusion zones, all preservation measures be put in place in recognition of the significance of our industry and the importance of preserving it in the Hunter Valley. We know – five previous PACs have reinforced this – that we are vulnerable to reputation threats imposed by mining.

Godolphin Kelvinside – Mr Ross Cole is here today and he will speak separately – that particular stallion stud is one of Australia's – and, indeed, the world's largest racing and breeding operators. By their own admission in their social impact assessment, the proponents admit that this stud is 1.2 kilometres away from the boundary of the mine site. For us, this is far too close for comfort.

We have heard that the current mining situation is putting off investors in our industry and other agricultural industries here in the Hunter Valley. To approve this mine will be yet another signal that this is not the place to invest. We also have impacts on our history, our heritage, our local community and jobs and diversity, and we ask the question: is one small marginal-at-best mine worth all the risks we've outlined?

I want to touch very briefly on the Department of Planning's assessment report, and it's – I think, with huge regret and disappointment that we find it entirely deficient. This is not a new thing for us. Contrary to previous modifications, its conclusions are oddly contrary. There has been no interrogation and no critical analysis of what the proponent has put forward. There has been unquestioning acceptance of the proponent's assessments, claims and arithmetic. Key issues have been left hanging and unanswered, including about the viability of this mine, the need to assist – sorry, and whether we're going to proceed in the future to open-cut.

We don't have – sorry, this – the department's assessment report provides us with absolutely no confidence in the planning system, and that is regrettable. And, in our view, we suggest you give it absolutely no weight. So in summary and in conclusion, this is not a simple modification of a DA. This is not a granny flat or a simple extension to a house; it's a major mine proposal by an inexperienced proponent in an area that is recognised as operationally and geologically challenging.

It has no economic justification. It will make New South Wales and Australia worse off, economically. Its impacts will be environmentally damaging, both incrementally

and cumulatively. It has no social licence to operate. It is positioned at the gateway of the Upper Hunter's equine critical cluster, and Cameron showed that parts of the ECIC that have been mapped, in fact, are within its boundaries. It is not in the public interest, and on the basis of the expert advice you will hear today, we recommend it be rejected.

PROF LIPMAN: Our next speaker is Rod Carr.

MR R. CARR: Look, good afternoon, commissioners, and thank you very much for the opportunity to present today. My name is Rod Carr. I'm a director with Marsden Jacob Associates, and I'm also an economist, having worked in the area for about 20 years, including several years with New South Wales Treasury. I was engaged by the Hunter Thoroughbred Breeders Association to review the social and economic assessments of the modification application. In this presentation, I'm actually going to particularly focus on the economic aspects of it given the time constraints, but I note some issues as well with the social impact assessment. In preparing the assessment, I've obviously looked at a whole series of documents, including those prepared by experts, many of which have been presented on today.

Basically, in terms of the review, my analysis finds that the economic analysis is, essentially, biased in favour of the mine, and the issues relate to overestimation of benefits, coal prices, extent of product coal and underestimation of the costs, capital costs, operating costs and externality impacts, many of which have already been spoken about today. The social impact assessment also suffers from these biases and has a really critical issue in the sense that it's not based in a cumulative impact assessment framework.

What I'm going to talk about today, though, is what impact does more realistic assumptions have on the economic outcomes at national and New South Wales levels, and I'm going to start at the national level. So the economic analysis that you would have seen for this mine presents the results at national and at New South Wales levels, and it claims a net social benefit of \$236 million at the national scale, but, as we've already heard today, there are a number of problems with what's in there. When we look at the costs, it assumes \$15 million that feeds into that number, not the 162 that experts are pointing to. Operating costs are at least 10 per cent higher if we factor in higher FTE counts, and I don't do anything around the coal washery, which is only going to increase the cost.

If we also then look at the revenue assumptions, well, the assumed coal price, US\$75 per tonne, is at risk, particularly in the context of high-ash coal, and I will be talking a little bit about the impacts of changes in that. It also shows, from my analysis, that the result is very sensitive to the coal production schedule. And if we then have a look at externalities, well, basically, there's none included in the analysis apart from a very marginal change around greenhouse gases despite the fact that there are exceedances of air and noise criteria, significant hydrological risk, significant visual impacts for local residents, tourists, travellers and agricultural industries, significant greenhouse gas emissions and material impacts on the equine and viticultural CICs.



5 So what does the result look like when we change some of the assumptions in here and put more realistic ones in place? 236 is our starting point. If we simply reduce the value of coal by 10 per cent, which is less than the differentials that we're actually seeing and less than the outlooks point to, and then we put a bit more capital in, reflecting the true capital cost of this project, and then we reflect the true operating cost of this project, and even with a small change in externalities, five per cent, this line here is the most important one. That's an MPV of zero. We're below the line as a result of those changes.

10 Let's put greenhouse gases in now. Now, the analysis at the moment uses a clever little thing called population of standing to exclude most of this, but Australia has signed on to Paris Agreement and wants to take responsibility for our greenhouse gas emissions, so if we include these, we've got another 50 to 60 million dollars of cost that emerges in this model, and we've got a net social loss to Australia of \$73 million. That's not looking like a healthy economic outcome from a project of this nature.

20 So let's have a little look at the coal price assumption, which is one of the ones I spoke about in terms of the changes, and if we look at what the World Bank is actually projecting – and this is from late last year – they're actually saying coal prices are going to move from about \$90 to \$50 by about 2030, and this is the operating period for this mine. Now, the assumed coal price in the analysis is currently \$75 per tonne, a relatively small discount on what they assume the benchmark coal price would be, which is \$90 a tonne. Now, these are benchmark coal prices. This is not 5500 kilocal coal. So I would argue that if you look at the outlook that we're facing here, the coal price is overestimated, and the 10 per cent of adjustment I've made may not actually reflect what might eventuate where this mine is concerned.

30 If we now look at this from the state perspective, and that's a different type of analysis, again reflecting what's in the guidelines, as published by the New South Wales government. I would argue that the externality costs, as you've heard about already today, around noise, air, water and greenhouse gases, have been grossly underestimated. There's only .1 of a million dollars in there, despite the material impacts that have been identified. The company tax benefit of \$14 million assumes a 35 30 per cent company tax rate despite there being clear evidence that these companies do actively minimise their tax cost and typically pay between 2.7 and 6.8 per cent.

40 The producer surplus benefit would have to be adjusted for the changes in the capital and operating costs, the change in the revenue, and, also, there's an interesting point in there where they talk about the fact that 32 per cent of the producer surplus is justified because it's the New South Wales share of project ownership. I can't find any evidence to this effect, and I don't understand why royalty payments haven't been subject to the same treatment, which would knock 32 per cent of the benefit out 45 from the royalties because that would be what we would consider to be a transfer payment in economic sense. And, lastly, the economic benefits to suppliers. I don't

know how this has been derived beyond reference to an input-output table, and it's very unclear as to whether this would actually eventuate for the region.

5 So what does this do? Well, look, if we start in the best-case situation, which is, effectively, that \$75 per tonne coal price, when I make a series of adjustments to it, the mine is marginally beneficial. These adjustments relate to changes in the producer surplus, royalties, company tax, etcetera. But if we actually look at an outlook which is probably more reflective of what the coal price is going to do to this project – and this is actually based on a scenario which is in the economic analysis report; it's the reduced revenue scenario in the report – suddenly we're in a negative situation here. One of the key assumptions in here is that New South Wales takes responsibility for its greenhouse gas emissions as well rather than externalising this to the rest of the world, and it's only based on scope 1 and 2 emissions, of which there are approximately 369,000 tonnes of CO2 equivalent reported as being a result of this mine.

20 Now, this project is in the middle of two recognised critical industry clusters. The analysis doesn't reflect this at this point in time. It basically assumes no impact despite proximity issues, despite numerous presentations to the effect that they're very concerned that this project is affecting business certainty. Why is this important? Clearly, economic diversification is critical to the future of the Hunter Valley, particularly as it's in the process of transitioning away from mining and coal-fired power stations. So the importance of the critical industry clusters and sustainable, long-term economic diversity is critical.

25 This is my last slide. Basically, the EP and A Act says you need to have a think about the cost-benefit analysis as part of your considerations. In our review, we found that when you actually put some more reasonable assumptions in place around the costs and the benefits, you've got a negative outcome at the national and the state scale, so it can't really be relied upon in terms of the assessment of this. And, fundamentally, I would ask the question: how can you approve a project when the revenue from royalties, somewhere between 4.8 and 6.8 million dollars per annum, is less than the annual greenhouse gas emissions cost, which is probably over \$8 million even when conservatively valued, and particularly when you consider that New South Wales has said, "We will take responsibility for our emissions. We endorse the Paris Agreement"? Thank you very much for your time.

PROF LIPMAN: Thank you. Frank Butera, please.

40 MR F. BUTERA: Dear Commissioner, my name is Frank Butera. I am an associate with an international multidiscipline engineering firm. I have over 20 years experience in large scale environmental industrial and transportation projects. My area of expertise is noise, vibration and acoustic planning. I would like to address the PAC regarding noise impacts associated with the proposed modifications.

45 Bridges Acoustics prepared a brief acoustic impact assessment for the proposed project dated 5 June 2018. MACH Energy currently operates Mount Pleasant open cut coal mine located to the abutting south of the Dartbrook Mine.

- Wilkinson Murray completed a noise and blast vibration assessment dated 25 May 2017. In particular, the Bridges Acoustics assessment does not investigate intrusive noise levels in accordance with the New South Wales policy for industry. There is insufficient information within the Bridges Acoustics report to complete the
- 5 intrusiveness assessment. Blasting is anticipated, however, there is no ground-borne vibration, blast noise or blast overpressure completed within the environment assessment. An accumulative impact assessment acknowledging the abutting Mount Pleasant open cut coal mine has not been completed.
- 10 Noise limits proposed by Bridges Acoustics are significantly higher than the noise limits proposed by Wilkinson Murray for the same residential properties surrounding the Dartbrook Mine. There is no understanding or acknowledgment of the existing ambient noise levels in the vicinity of the residential properties. Social impacts associated with operational noise from Dartbrook Mine have not been assessed. The
- 15 noise limits assigned to the project are inconsistent with the noise limits for Mount Pleasant. For identical receiver positions surrounding Dartbrook Mine Bridges Acoustics presents project noise limits 6 dB higher than the Wilkinson Murray report.
- 20 This is a significant difference for operational noise limits. There is no clear and concise understanding that links the relevance of the noise limits detailed by the DA issued two decades ago to the current application. There are no background noise measurements or reference to other background noise measurements. This is considered to be an unusual approach since it is a requirement of the noise policy to
- 25 understand the existing background noise levels. In summary, there are conflicting noise limits between the Mount Pleasant and Dartbrook Mine for the same residential properties. The noise source data for the acoustic modelling by Bridges Acoustics is inconsistent with other Bridges Acoustics noise assessment reports for similar mining projects in the region.
- 30 The noise source levels presented by Dartbrook Mine for Dartbrook Mine are lower. For example, haul truck noise levels considered by Wilkinson Murray for the Mount Pleasant project are similar to the industry standard and DEFRA noise levels for extractive industries. The Mount Pleasant haul truck noise levels have been
- 35 modelled using data that is up to 7 dB higher than the noise levels for Dartbrook Mine. This approach results in an environmental assessment that has the potential to misrepresent the actual noise levels. Bridges Acoustics have adopted lower equipment noise source levels and have adopted significant operational restrictions to the project.
- 40 There is insufficient information with respect to the origins made or repeatability of the noise data relied on in the noise assessment. Use of higher noise source data similar to Mount Pleasant or adopting alternative assumptions with respect to haulage operations will demonstrate an exceedance of the project noise limits.
- 45 Bridges Acoustics have undertaken noise modelling in ENM software. The developer of ENM no longer supports or maintains the software and it has not been commercially available for over a decade. Since the developer of ENM no longer

supports the product, additional noise conditions issued by New South Wales departments have not been implemented or verified by the software.

5 This includes newly released meteorological data detailed in fact sheet D accounting for noise enhancing weather conditions from the Noise Policy for Industry 2017. Bridges Acoustics have not validated or calibrated the noise model. As a result the noise model is not representative of local conditions. For the Commission this is important because the modelling has not been assessed against local conditions. The Bridges Acoustics noise assessment presents an exceedance of the DA noise limits.  
10 There is no accumulative noise impact assessment that acknowledges other nearby extractive industries for the abutting Mount Pleasant mine.

It is a requirement of the noise policy to assess accumulative impacts. For residential properties located in Kayuga, combining Dartbrook and Mount Pleasant operations  
15 will increase the exceedance when compared to noise limits of the DA. For Kayuga there will be a greater exceedance when considering the lower Mount Pleasant noise limits. The compounding noise impact of simultaneous mine operations and inadequate noise modelling will result in a continual exceedance of the project noise limits. A noise intrusive assessment in accordance with the policy has not been  
20 completed. The intrusive noise limit is often determined as the measured background noise level, plus five dB.

There is the likelihood that operational mine noise will be 15 to 20 dB higher than the ambient background noise levels in Kayuga. Considering the findings in the  
25 matter Gloucester Resources Limited v The Minister for Planning New South Wales, Chief Judge Justice Preston commented that operational noise emitted from the Rocky Hill Coal Project had the potential to contribute to adverse social impacts to the nearby noise-sensitive community.

30 Justice Preston acknowledged that the background noise levels of less than 30 dBA will result in operational noise levels to be more noticeable and likely to impact the residents acoustic amenity. It is expected that the ambient noise level surrounding the Dartbrook mine to result in low background noise levels, most likely less than 30 dBA. Acknowledging that background noise levels are required to address social  
35 impacts and noting that Bridges Acoustics' report omits the data, the presented social impact assessment remains incomplete and inaccurate.

In summary, the noise assessment is incomplete and fails to provide an intrusive noise assessment, a cumulative noise assessment or social noise assessment. The  
40 report lacks information that accurately assesses noise impacts of the project. The noise impact report demonstrates that the project noise limits will be exceeded, but noise assessment does not demonstrate a true representation of the current or future noise and blast vibration impacts. In my opinion, the Commission cannot rely on the findings of current state of the noise assessment. Thank you.

45

PROF LIPMAN: Thank you. The next speaker is Owen Droop. Thank you very much. Thank you. Thanks, thank you.

MR .....: Who's next?

PROF LIPMAN: This is Owen Droop.

5 MR O. DROOP: No problems. How's that? Can you hear me okay?

PROF LIPMAN: Yes.

10 MR DROOP: Commissioners, ladies and gentlemen, my name is Owen Droop. I'm  
a hydrologist and water resources engineer with over 25 years of experience, quite a  
deal of which is related to mine water management for projects and mining clients,  
but also for government agencies at a catchment scale about improvement of mine  
water management. I've developed this presentation in collaboration with Mr Sean  
15 Murphy, who's hydro-geologist and groundwater expert, also with about 25 years of  
experience in mining infrastructure, environment and water management.

Our brief as experts for this process was to provide objective, independent advice on  
whether the available project information did three things: (1) does it give a good  
20 understanding of the likely water resource behaviour of the project over its projected  
life, (2) whether it quantifies the risks and potential consequences and impacts of  
that project; and then (3) whether it provides a clear and robust plan to appropriately  
manage those risks and impacts. In short, does the available information provide a  
sound basis for confident decision-making regarding the project?

25 The basic conclusion from our review is that, no, it does not meet these basic  
requirements. In regards to the first point of the review, there really has been no  
meaningful assessment of the project as now proposed to be developed and operated.  
There is a fundamental lack of information demonstrating how the project water  
management system would operate and behave under the range of climatic  
30 conditions and potential operating conditions it could experience over its life.

Some of our concerns include that the water balance information that's quoted is – is  
average only values from studies undertaken some 20 – 10 to 20 years ago, which are  
35 provided for an incomplete list of the project's inflows and outflows. There's no  
meaningful assessment of project flood risk, despite the very clear and repeated  
requests for such from the Office of Environment and Heritage. There is no  
assessment of the project under conditions in which the coal washery was in  
operation, which would represent a major and fundamental change in the overall  
project water balance and ongoing water management requirements.

40 There is no recognition of climate change on groundwater conditions or flood risk, or  
on an already currently stressed water supply system. There has been no update to  
the groundwater model. Groundwater conditions and conclusions are based on  
results of modelling undertaken in 2000, some 20 years ago. Now, this lack of any  
45 updated assessment is of particular concern, given the significant changes in our  
knowledge and understanding of water resources over these past 20 – twenty-odd  
years, including within the Hunter Valley specifically.

5 A key example of this improved knowledge is in the – is provided by the Greater Hunter Regional Water Strategy, which released in 2018 by the New South Wales Department of Industry. It – the strategy provides a series of incredibly important outcomes, several of which I've highlighted here. One is that the Hunter Valley has, reasonably recently, experienced climatic conditions which would see allocations within the system reduced to zero for more than 10 years – 10 consecutive years. This alone flags the significant financial and operational risk to a project relying on water and on other water users, which simply hasn't been addressed in this assessment.

10 However, notwithstanding these already key findings, or this already key finding, the strategy found that the natural variability of climate is actually much greater than what we've observed in the recent climate. So what that means is that these conditions in the 1940s, etcetera, are probably not as extreme or as unlikely as we first thought. On top of this, the strategy also is very clear about the strategy – the risk of drought in the Hunter is already greatly increased and increasing beyond these historical conditions, the major influence of which are climate change and, notably, mine-related reductions in catchment baseloads, which in itself is a direct indication of changed and changing groundwater conditions.

20 In short, the natural groundwater and surface water conditions are more variable and extreme than we thought. They have changed for the worse, and they are continuing to do so. These outcomes clearly indicate the need for an updated assessment of groundwater and surface water conditions, rather than an automatic acceptance of and reliance on outdated information. It cannot be taken for granted and must be assessed properly, which it has not.

30 What this lack of a project specific assessment adds up to is a range of risks associated with the project that just aren't understood or recognised. There are operational and financial risks to the project associated with drought and flood that aren't factored in. There's water security and water quality risks to the local water resources and water users that haven't been recognised or defined. There are risks to life associated with potential flooding, which have been effectively ignored despite explicit and repeated requests for this assessment from the OEH, and there are inherent environmental, social and economic risks to the state which aren't understood or described. We don't know what these risks are, because they simply have not been assessed.

40 The result of this lack of an understanding of the project's operational behaviour, its associated risks and potential impacts is a proposed approach to risk management that is effectively reactive. There are generalised statements regarding future updates of management plans and impacts to be dealt with as or after they occur, and for projects of this type, a reactive, see what happens approach to water management is simply inappropriate. Impacts to an area's water resources once they occur are often irreversible, irreparable and unable to be adequately compensated.

5 So the implications of all this: one, the project information doesn't provide any meaningful assessment of the project as it is planned to be developed and operated. There's no meaningful baseline against which to be able to clearly define actual impacts, and there isn't a clear picture of how the project water management system may be required to operate or the conditions under which it would need to manage and mitigate impacts to its own operation and to the water users within its catchment.

10 Two, without this basic understanding, we can't quantify or understand the risks of, for example, supply failure for the projects, impacts on other water users under very dry conditions, or the potential risks and consequences of project flooding and failure under very wet conditions. And then, three, without a clear understanding of those risks and potential consequences, the fundamental outcome is an approach to managing risk and impact which is reactive and after the fact.

15 In conclusion, nobody, including the proponent, department, myself or the Commission knows what the real risks and impacts of the project would be. The project as now proposed hasn't been meaningfully assessed, and critical parts of the reported information, which has been drawn from work undertaken some time ago, are outdated and ignore critical improvements in understanding of both existing  
20 conditions and future risks. Given that the availability and quality of surface water and groundwater are such critical parts of the ongoing viability of the area and the Hunter Valley in general, this uncertainty does not allow for a well-founded decision on the project and simply does not support a decision to approve it. Thank you for your time.

25 PROF LIPMAN: Thank you, Owen. Tim - - -

MR T. OWEN: Owen.

30 PROF LIPMAN: Owen.

MR OWEN: An Owen to Tim Owen. I would like to start off by acknowledging the traditional owners of this country, the elders of the past, the present, those here today and of the future. The presentation I give today is supported by the native title  
35 claimant for this area and also the Local Aboriginal Land Council, the CFO of who is here today. Good afternoon, Commissioners. My name is Tim Owen and I am a principal of GML Heritage, with a PhD in Aboriginal Archaeology. And I am a senior research fellow at Flinders University. I have 19 years experience working in Aboriginal heritage with Aboriginal communities. I have reviewed the project EA in  
40 collaboration with GMLs CEO, Sharon Veale. The Upper Hunter is a complex cultural landscape, with intertwined natural, Aboriginal and non-Aboriginal heritage values. These values are historic, aesthetic, social, spiritual and scientific. They constitute cultural significance under the ICOMOS Burra Charter. Historic heritage: the Upper Hunter's historical cultural landscape has been recognised by former pacts  
45 as having:

*Cultural significance, due to its historic and continuing land-use patterns, with built heritage structures, unique topography, landforms and environment, which may warrant listing at the state or national level.*

5 This specific part of the Hunter contains many listed heritage items. The Upper  
Hunter Shire LEP identifies around 40 listed heritage items within or near the town  
of Aberdeen, including Riverview and Kayuga Homesteads and the MacIntyre,  
Kayuga and Dartbrook Cemeteries. The project EA does not include a review of  
10 historic heritage items and states that no heritage items will be impacted. I disagree  
with this statement, because it is not correct to conclude that no historic heritage will  
be impacted without first having assessed the area which could be affected. Historic  
heritage was considered as part of the original DA and should have been considered  
as part of the modification 7. It was not. The Burra Charter article 6 details an  
15 assessment of cultural significance is the accepted basis and prerequisite for good  
decision-making and management of heritage. Yet the modification documentation  
does not provide the required assessment to enable any informed decision regarding  
the nature and extent of potential impacts.

20 Aboriginal heritage: the significance of the region to Aboriginal people is evident  
through the PCWP native title claim. Aboriginal sites and places at the regional level  
encompass a range of Aboriginal values and their traditions. There are now many  
publicly available reports and information that detail the importance of this region to  
the local Aboriginal community. Beyond archaeology, the PCWP have confirmed  
25 that the area in an around the Dartbrook Mine contains travelling routes, a major  
Aboriginal song line, several ceremonial areas. Of considerable note to today's  
proceedings is the male ceremonial grounds located on the northern boundary of the  
Dartbrook mining area. I will get to that in a minute. Modification 7 only considers  
the impacts directly inside the proposed mineshaft area. Nothing outside this area  
has been considered, a matter detailed by the OEH in their RtS. Their comments are  
30 on the screen for you to see.

I note the proponent argued against any heritage assessment outside the mineshaft  
area. Their heritage assessment simply does not comply with OH policy for  
35 assessing Aboriginal cultural landscapes or intangible values. To address regional  
subsidence and other impacts, the entirety of the mining authority boundary should  
have been assessed to provide the appropriate context. This issue was raised by the  
native title group during the project assessment phase and is clearly stated in the EA  
documents. Government mapping shows subsidence over an extensive area. This is  
40 from government mapping. Cultural heritage values within this area are clearly not  
understood, as cultural heritage has not been assessed.

To comply with the 2001 project approval, the proponent would need to undertake  
cultural heritage assessment for the whole mining area. The EA suggests subsidence  
would be limited to 100 millimetres. An Anglo AEMR report details subsidence up  
45 to 1.6 metres has previously occurred. There's clearly a contradiction there. The  
department's AR states that subsidence in the northern area requires further  
modelling and new geotechnical work. Therefore, a true and accurate assessment of



subsidence impacts, a consequence of further mining, is yet to be presented and yet to be understood. The 2001 Dartbrook conditions of consent clearly articulate the environmental consequences of subsidence impacts, which includes damage to Aboriginal sites.

5

The mine's performance measures for Aboriginal and heritage sites requires both negligible subsidence impacts or environmental consequences and negligible loss of heritage value. If modelling for subsidence impacts and heritage assessments are incomplete, it does not logically follow that the proponent can assess the level of subsidence impacts on heritage sites to be negligible. It would appear impossible to enforce the project's current conditions of consent. What compromises Aboriginal heritage in the EA report does not adhere to OEH definitions of Aboriginal heritage, nor is it supported by the project's own documentary and material evidence and, notably, the native title claim.

15

Aboriginal heritage is simply not defined through archaeological sensitivity or stone artefacts. Aboriginal heritage is a complex relationship between multiple values which extends through country to connect places, beliefs, traditions, events and people. For, instance, the EA states that Aboriginal sites will be located within one kilometre of the Hunter River. This view of archaeological sensitivity is erroneous. It disregards the inter-connected pattern and systems of movement and use of landscape and the beliefs and value which imbue the Aboriginal community today with that landscapes cultural value. The EA statements that all Aboriginal sites should be located close to the river is contradicted by the project's own Aboriginal archaeological assessment. It's clearly demonstrated for you here on the screen.

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25

This assessment shows the ..... recorded sites close to the Hunter River, all identified sites in the project EA are located over one and a half kilometres from the Hunter River. Today, for the IPC, the highly sensitive and significant nature of this area is further demonstrated. The PCWP have provided permission to disclose the presence of a male Bora or ceremonial area in the north of the mining authority boundary. The LIDAR server they've used to record this part of the area defines a series of concentric earth rings. The extent of the landscape connection for this ceremonial site is likely to extend over kilometres. In fact, in discussion with the head of the LALC today, he has indicated that it could be eight to 10 kilometres of connections.

30

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The central Bora area is in – located inside the mining subsidence district. The site has not been assessed or considered as part of the values assessment for modification 7. Impacts to the Bora area as a result of further subsidence are not known. The impact resulting from mining on the social and traditional Aboriginal values of the contemporary community are not known because the Aboriginal community has not been asked. This example demonstrates the project EA does not comprehensively or correctly assess Aboriginal heritage. Determining a development proposal when cultural values have not been comprehensively assessed may give rise to unplanned adverse impacts on significant heritage values. Without proper assessment, these impacts cannot be dismissed as negligible.

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My final matter. Muswellbrook LGA has a high proportion of Aboriginal people compared to other nearby areas. Aboriginal people are, therefore, a key local stakeholder and community group. Modification 7 includes a social impact assessment. It is reasonable to expect the SIA would have included targeted  
5 consultation and assessment of the effect, both positive and negative, on the Aboriginal community. However, the SIA reuses the consultation undertaken for Aboriginal archaeology. This consultation identified 78 potential parties, registered 20 groups, but involved only three groups in a single day on-site archaeological survey. It did not include the native title claimant who had specifically requested a  
10 whole of mine area assessment be undertaken.

All consultation with the Aboriginal community throughout the EA was expressly of the purpose of archaeological assessment only inside the modification area. It is clearly shown in the project's EA documents. This consultation was not undertaken  
15 for an SIA with the Aboriginal community. The social impacts on the Aboriginal community have not been assessed. The effect resulting from the proposed mining activity on Aboriginal communities and the local Aboriginal people are unknown, but they are likely to be cumulative. Representing the OEH Aboriginal consultation process as the Aboriginal SIA is grossly misleading.

An absence of heritage survey and inadequate acknowledgement of social impacts on Aboriginal communities were specifically addressed through the Rocky Hill Coal Project 2019, Land and Environment Court decision. This finding is specifically relevant to the IPC today and I just refer you to points – they're quoted on the screen.  
25 They're not quoted on the screen, but I'll tell you them. The Dartbrook Mine assessment should have considered the cumulative impact to Aboriginal heritage sites, places and values and the social impact to the local and regional Aboriginal community, take into account the long-term cumulative impacts to cultural identity and wellbeing which directly affects the Aboriginal community today. Thank you,  
30 ladies and gentlemen, Commissioners.

PROF LIPMAN: Thank you very much. And Michael Wright, is it? Michael Wright.

35 MR M. WRIGHT: Yes. Thank you.

PROF LIPMAN: Thank you.

MR WRIGHT: Thank you very much. Good afternoon, Commissioners. Thank  
40 you for the opportunity to speak. My name is Michael Wright. I'm a registered landscape architect, and I have 30 years experience in landscape character and visual impact assessment. From a landscape character and visual impact assessment perspective, there are few rural land uses that contrast more profoundly than coalmining and agriculture. The Upper Hunter and the Segenhoe valleys north of  
45 Aberdeen are characterised by rural and natural landscapes that are both highly productive and highly scenic. The key aspects are fundamental to the values and the viability of the industries that occur in this region. This proposed Dartbrook Mine

modification is the most northerly mine in the Hunter, and extends into this highly scenic and valuable landscape.

5 The Upper Hunter Valley is visually diverse with varied landforms from flat, irrigated floodplains to steeply undulated forest and hills. It is high value agricultural landscape with significant investment in a range of agricultural land uses. A large proportion of the area has been identified in the Strategic Regional Land Use Plan as part of the equine critical industry cluster shown in purple on this slide. There is a significant concentration of horse studs that can be seen on this map in white inside  
10 that purple cluster, north and east of Aberdeen.

The environment assessment reports prepaid by AQC and the DPE all fail to adequately address the true extent of the visual impacts of this proposed mine modification. The environment assessment report's Modification 7 prepared by  
15 AQC in June 2018 has just one paragraph on visual assessment and two site photographs. It states that there are no private residences in the vicinity and that the New England Highway is the only public area affected. It concludes that the visual effect is low.

20 There is no mention of the 192 B-double trucks movements every three and a half minutes for 11 hours of the day, five days a week, nor does it discuss the activities at the Kayuga entry or the coal-handling facilities east of the railway line. The response to submissions report prepared by AQC contains a visual impact assessment only after the DPE requested it as part of a social impact statement. The report also  
25 includes two pages on visual impact assessment and one map. It focuses on the shaft shed with inadequate assessment of truck movement, stockpiles and other facilities.

Private houses are not properly assessed. Only one house is identified as being impacted, and that was discounted because it is nearby a concrete batching plant. It  
30 is – incorrectly states that the houses are – the rest of the houses are screened by topography or vegetation. Local roads and streets are not assessed at all. The assessment report prepared by the DPE does not mention visual impacts at all. However, the DPE states in their report that:

35 *Due to the 10 years of inactivity at the mine the social impacts actually experienced would be more akin to a new mine.*

This demonstrates that the level of visual impact assessment has been totally inadequate. The public areas that should have been considered are a national  
40 highway, a main regional rail line, three local roads and a local street in Aberdeen, shown on this slide. These public areas were not adequately assessed and there are some instances where they're ignored entirely. In terms of private areas, there are approximately 30 houses in the vicinity, not none, of this project. There are approximately 15 houses which have views of the proposed mining activities. Six of  
45 those houses are between 120 and 1500 metres from the proposed mining activities and is shown with the red circles and arrows. Two houses just south of Aberdeen

and two in Kayuga, which have clear views of the mining activities, have not been identified or assessed at all in the EA reports.

5 There are four main areas of the mining activity that should have been considered for visual impact. The shaft shed and the new access road – I've just jumped to conclusion. That's very clever. Sorry about that. The shaft shed and the new access road, 192 truck movements every three and a half minutes; the Kayuga entry activities and the east site coal-handling facility east of the railway line, which was not considered at all.

10 In terms of viewpoints that should have been assessed, I have identified at least nine which should have been considered, and they are the highway, the railway line, four houses – two near Aberdeen – and also in Aberdeen itself behind the two farmhouses, and then in Kayuga in the main street and two houses in that location, as well as a point on Dartbrook Road where you can look into the Kayuga entry. Indirect visual impacts are also caused by light pollution.

20 Now, this is a slide that demonstrates what light pollution can look like, and is currently experienced in this area. So you can see Aberdeen in the upper middle of the slide, Muswellbrook down below, and a lot of that orange, red and green is caused by mining activities. You can also see the Dartbrook Mine Modification in its inactive state just beneath the word Aberdeen. There are the two green areas just to the south.

25 So what's interesting about this is that coal mining will produce a light pollution level that is akin to a suburban or urban area if you look at the bar scale at the bottom, whereas rural areas such as the areas north, east and west of Aberdeen are in a dark to rural sky. So there's a very significant contrast, and my point is that if Dartbrook were to become active, the mine area would change from that soft green colour that it currently have in its care and maintenance mode to a yellow and red mode which would therefore be so much brighter in the night sky.

35 Just in terms of mitigation, tree screening is often cited as a mitigation for visual impacts. However, trees are not static screening objects. They grow taller. They can be affected by storm damage, drought and disease, and ultimately they die. The screen plantings along the north-eastern – along the New England Highway, which the EA documents rely heavily on to mitigate the visual impacts, are already thinning out and looking stunted and do not screen the site from public or private areas, as the two photos on the left illustrate. The third photo is an example from the Lower Hunter Valley of a mine screen planting, which demonstrates the transparent effect as the trees begin to mature and expose the objects behind.

45 In conclusion, the visual impacts for this proposed mine project have been overlooked throughout the whole EA process. The original EA report ignored almost all of the visual impacts, and particularly the range of sensitive receivers around the project area. Only after the DPE requested a visual impact statement did the

proponent respond in the response to submissions report. Again, this attempt was inadequate and completely understated the visual impacts.

5 The assessment report prepared by the DPE fails to mention visual impacts, obviously assuming the previous assessments by the proponent were accurate and reasonable. The DPE states due to the passage of time, this mine should be akin – assessed as being akin to a new mine. The proposed mining activities, including 192 truck movements a day across an open rural floodplain, large buildings and stockpiles, and 24/7 activities at the east site will create significant visual impacts on 10 the rural character of this valley. The Upper Hunter Valley landscapes, as has been said many times today, are largely untouched by mining activity, and therefore this precious valley landscape should be protected from the impacts of coal mining. Thank you very much.

15 PROF LIPMAN: Thank you. Ballanda Sack.

MS B. SACK: Good afternoon, Commissioners, ladies and gentlemen. I'm Ballanda Sack, special counsel at Beatty Legal. I will be briefly exploring some of 20 the key legal concepts relevant to your assessment. First, some preliminary legal issues. This is a proposal for a different project than that contemplated by the existing consent. The removal of a core element that the original project, being the use of the Hunter Tunnel for coal conveyance, raises a serious question as to whether this is truly a modification under section 75W. I do not propose to address this 25 further today, save to say that you need to satisfy yourselves that this is an application which you can deal with as a mere modification.

The proposal is constrained by the terms of the application. The application before you does not include the washery or production over 1.5 million tonnes per annum. 30 The proponent and the department, in its draft conditions, leave open the potential for future use of the washery and an increase of coal output. This is not part of the application before you. Its impacts have not been assessed and, hence, these elements of the previous abandoned project could not form part of any consent for this application. To do otherwise would put at risk the legality of any determination.

35 Your role is to assess this proposal on its merits, having regard to its contemporary, contextual, economic, social and environmental impacts and benefits. That is to say the project is to be assessed having regard to its impacts, not merely by reference to whether those impacts differ from that which was approved 18 years ago. How the modification compares with a project which has been abandoned for 13 years is an 40 irrelevant consideration. A social impact assessment asserts that it has considered the proposal as a new project, as all impacts will be felt by the community as new impacts. The same applies for all other impacts: visual, noise, air quality and water.

45 The proposal before you is akin to a project thought bubble. The proponent is unclear of the project definition. The assumptions in the economic assessment are unsubstantiated and contrary to reasonable evidence. The water impact assessment is unconventional and fails to take into account climate change. No impact assessment

has been undertaken of the shaft or the shaft building; the details of both of these are unknown. The heritage and visual assessments are extremely limited. Cumulative and intrusive noise have not been assessed. And no consideration has been given to the end of life or rehabilitation proposal for the mine and the shaft. On the publicly-  
5 available material, you do not have sufficient credible information to assess its impacts.

So now moving to some key concepts. The limited case law on the application of section 75W establishes that consideration by the consent authority of the public  
10 interest is fundamental. The mining SEPP requires a consent authority to consider existing approved and preferred land uses in the vicinity and their compatibility with mining. But for this mothballed mine, there is no coal mining in the Upper Hunter. The predominant land uses in the area are agricultural, dairy, equine and wineries and tourism associated with the rural and scenic values of the area. Equine,  
15 viticulture and ..... critical industry clusters were mapped in 2012, giving recognition to the economic and cultural importance of these land uses. An equine CIC has been declared within the project area.

However, due to the pre-existing mining consent the values of this site are not  
20 directly protected by the mining SEPP. The Upper Hunter Shire Council has issued a policy statement strongly opposing mining in the shire. The expression of community desires for the area must be given weight. Similarly, the views of the community expressed before you today and in written submissions demonstrate that this mine is incompatible with the existing approved and preferred land uses. Now,  
25 cumulative impacts. Consideration of the cumulative impacts requires an understanding of the impacts of other approved projects in the vicinity. The air quality assessment provided by the proponent has used 2014 data as a measure for estimating cumulative air impacts. There are five mines that could reasonably be considered to contribute to air quality impacts. Before you is a table which identifies  
30 the actual ROM production rates of these mines in 2014 and the production rate permitted by their planning approvals, using 2022 as an example.

You will note that the existing approved mines were not operating at full capacity in  
35 2014, and that the cumulative of approved ROM production rate of these mines could be close to 150 per cent of what it was in 2014. You will recall that based on 2014 data and incorporating some assumptions regarding the predicted impacts of Mount Pleasant, the air quality assessment already predicts exceedances of NEPM criteria. Imagine the cumulative impact if each of the existing approved mines were  
40 operating at their full operational capacity.

On cumulative air impacts alone, this proposal cannot be approved. Social and  
indirect impacts. Most of the people speaking before you today oppose the project and all have expressed concerns about the potential impact of the mine on the clean  
green values of the Upper Hunter. You have heard substantial and substantiated  
45 evidence on the myriad of social impacts associated with this proposal. I don't propose to rehearse these, but I note the significance of adverse social impacts

associated with physical impacts, such as noise, dust or visual, have been recognised by the department and the court in the recent judgment in Rocky Hill.

5 Most speakers – secondly, most speakers have identified the importance of their sense of place and the distress they would suffer if the mine proceeds. An appropriate social assessment undertaken in accordance with the guidelines would demonstrate the significant adverse social impacts of this mine. The principles of ESD, particularly the precautionary principle and the principle of intergenerational equity, require consideration of the impact of the development on climate change and  
10 the impact of climate change on a development. The scope 3 emissions of the proposal have not been assessed contrary to the mining SEPP.

In Gloucester Coal, the court held that scope 1, 2 and 3 emissions were required to be considered and that greenhouse gas emissions and their likely contribution to adverse  
15 impacts on the climate system, environment and people can be a reason for refusal of a proposal. In reaching this conclusion, Preston CJ identified that, firstly, there's a causal link between a mine's cumulative greenhouse gas emissions and climate change and its consequences and also that it does not matter that the aggregate of a mine's predicated greenhouse gas emissions represent only a small fraction of the  
20 global total. The global problem of climate change needs to be addressed by multiple local actions. The same logic would apply to your assessment of the Dartbrook proposal.

And then, finally, looking at benefits and impacts, the impacts of the proposal need  
25 to be assessed qualitatively and balanced against the quantified net economic benefits. Provided that you consider that you have before you a legally competent application, this balancing exercise is your main task. You will need to have regard to the probability and timescale of predicted benefits or impacts, and the distribution of those benefits and burdens within and across generations.

30 In this instance, the asserted benefits of the proposal, which are solely economic and short term, benefit the proponent and possibly the broader community of New South Wales via tax or royalty payments. Whereas the burdens or cost of the proposal, such as the environmental, social and economic costs, fall squarely on the local and  
35 regional community. These adverse environmental and social consequences, such as water impacts, climate change contributions, the displacement of community and long-term health impacts may persist for generations.

40 You have to weigh the claimed benefits of the mine against its demonstrated negative impacts. Economic factors are the only possible positive for the mine. The quantum of this asserted benefit is overstated significantly and there are significant risks that it will not be achieved. A more realistic assessment demonstrates that the net present value of the mine is close to zero or negative. In Gloucester Coal, the department's  
45 own experts' robust criticisms of the proponent's coal pricing company tax assumptions were accepted by the court.

5 The economic assessment before you is similarly fatally flawed. The proposal will produce a low quality, high ash bypass product that is unlikely to meet market requirements. The capital expenditure, operating cost, head count and production rate assumptions are not credible and the proponent has inappropriately assigned a zero value to the negative impacts of the proposal. The manifest deficiencies in the project planning raise serious doubts as to the capacity of the proponent to deliver the project.

10 On the other side of the balancing equation, the potential adverse impacts of this mine in this location are significant, multifaceted and impact locally and regionally. They are unable to be mitigated or managed. I would like you to think carefully about intergenerational equity. If you approve this, you decide that the social, economic and environmental future of this region is mining first and everything else second. You cannot accept the department's canard that mining and agricultural land use is compatible. The evidence before you demonstrates that it is not.

15 You are required to make a determination in the public interest. In making your determination, you will need to consider the long-term legacy that you will bequeath to this community: either more dust, more water uncertainty, more greenhouse gas emissions and more social change, versus favouring existing, established land uses, which already offer long-term sustainable employment. Thank you.

PROF LIPMAN: Thank you. Mark Webster? Is Mark Webster here?

25 MS .....: Video

MR .....: He will be a video.

30 PROF LIPMAN: Sorry?

MR .....: He will be a video

PROF LIPMAN: Be a video. Right. And Tony Williams?

35 MR .....: Is he a video or - - -

MR .....: Yes. Just .....

40 MR .....: Okay.

45 MR B. WARD-THOMAS: Good afternoon. I too acknowledge traditional owners on whose land we must today – we meet today and their leaders, past, present and emerging. Madam Chair, IPC members, thank you for your time. My name is Barley Ward-Thomas for speaker number 48, Mr Tony Williams. Tony is the managing director of Goffs UK, a leading European bloodstock auction house. Tony has presented at previous Hunter Valley public hearings and regrets he could not



travel here today. Tony requested if I could present his brief message and an accompanying video on behalf of industry colleague Katrina Partridge.

5 I'm here representing Tony and Katrina as a local resident, landholder, and 30-year  
employee of the thoroughbred industry. Katrina is a locally based small business  
owner. She is a professional equine photographer. She couldn't be here today as she  
is attending the William Inglis yearling sale. Tony is a former associate of Newgate  
Farm, a local resident and property owner. Tony's written submission provides  
10 further detail as to why he sold his bloodstock enterprise, but in one word,  
uncertainty defines his decision to relocate.

Tony, Katrina and I are intrinsically linked by the Hunter Valley thoroughbred  
industry, an international centre of excellence, and one of only three in the world.  
We are three people with three different perspectives, but require the same outcome.  
15 We require certainty for our industry and this community. We require that we ensure  
a legacy for future generations, that it is intact and not undermined, and we require to  
ensure industry reputation, land, water and heritage is preserved.

20 Other speakers today have addressed the technical failings of the proposed Dartbrook  
mine. They have addressed the health concerns of yet another mine and the  
cumulative, ongoing issues we already have in the Valley. Our community is  
exhausted. We should not put in – we should not be put in a position of conflict over  
land use again and again. We have been here for too many PACs and IPCs. The  
critical industry cluster mapping, as required by the government, has been set and  
25 yet, mining continues to encroach on these areas. It erodes the investment  
confidence. It erodes the sustainability for agricultural industries and it erodes our  
resilience and community cohesion. Both industries need some certainty.

30 By the proponent's own admission, the underground mine is not a viable standalone.  
It is a precursor to open cut. If this underground is approved, we will all be back  
here again, having to defend our industry's existence when Dartbrook either move to  
open cut or is sold to another speculative investor, causing yet again more  
community division, more conflict and more uncertainty. It is unreasonable for this  
community to go through this time and time again.

35 In our view, given the environmental and community consequences, Dartbrook  
should not be allowed to operate in any form. The risks are simply too high. We  
recommend a rejection of the Dartbrook proposal. IPC Panel, on behalf of Tony  
Williams and Katrina Partridge, I will now play a video to ensure – and I will ensure  
40 that Tony and Katrina's submissions have been provided to the IPC Office. Thank  
you for your time.

45 **VIDEO SHOWN**

PROF LIPMAN: Thank you. I think – is it Ross Cole?

MR R. COLE: Yes.

5 PROF LIPMAN: Our final speaker tonight – my understanding is that Geoff Harris is going to make a submission and won't be speaking. So, Ross Cole, you're our last speaker.

10 MR COLE: Thank you, Commissioners, and as you point out, I've got the unenviable task of being the last speaker today. My name's Ross Cole. I'm the director of corporate services for Godolphin in Australia. I don't have any particular  
15 slideshow to show you. I don't have a funny hat. I do guarantee you two things. I'm very passionate about the subject, and in case I lose you, I will give you a paper. I moved to Hunter Valley about 27 years ago as a fairly young bushy-tailed lawyer and to raise my family in the Hunter Valley. I practiced law for about 20-odd years in the Upper Hunter, and five years ago, I moved to the role that I'm currently in as  
15 director of corporate services for Godolphin Australia.

20 During that time, my practice as a lawyer took me to – with offices in Muswellbrook, Scone, and at one time, at Aberdeen. In the last 10 years, I've moved my family to a property at Rouchel Road, Aberdeen where I've lived for, as I said, 20 years on a  
25 250-acre farm – sorry, a 250-acre farm. During that time, in my time in the Hunter, I've witnessed, firsthand, both the development of the Upper Hunter thoroughbred region to its world-renowned status and the advance of mining projects making their way ..... through the Hunter. Meanwhile, for the last 13 years, this mine has lain  
25 dormant.

30 Godolphin – Godolphin is one of the two largest thoroughbred breeding operations in the world. It has operations here in Australia, also in the UK, Europe, Japan and the US. In Australia, Godolphin's involvement developed rapidly from a small stay-in operation with the purchase and development in 2001 of the property Kelvinside at  
35 Aberdeen. Kelvinside is now a major studing operation from which Godolphin utilises its Darley studing brand. In 2004, the Australian champion sprinter Exceed And Excel was purchased by Godolphin for some \$22 million and, following that, similar investments were made in stallions and it's developed its own Australian brand in shuttle stallions.

40 In 2008, Godolphin negotiated the buyout of the entire Ingham livestock assets for a sum reported at the time to be approximately half a billion dollars. Importantly, Godolphin's purchase signalled to the world of breeding and racing that its biggest investor and largest player had confidence in Australia and, specifically, in the  
45 Hunter Valley and that the Hunter Valley could produce elite athletes to compete and conquer the world stage, and that has been the case. Today, Godolphin's operation spans some eight sites, including breeding and racing operations and we employ 350 people, many of whom live on the farm with their families, with others living locally, including at Aberdeen. We breed and train approximately 800 horses. The HTBA has dealt with the significance and breadth of the Australian breeding industry, and I will leave that to my formal presentation.

The present day sees the Hunter Valley industry at the top of the national performance ladder, successfully competing on the world stage, and its champion stallions are renowned and in higher demand here and overseas. It produces champion mares such as Black Caviar and Winx. The shuttle system whereby stallions perform services in two hemispheres has meant that stallions such as Street Cry is ..... at our Kelvinside stud at Aberdeen have substantially influenced our Australian breed. Street Cry is, of course, the sire father of Winx. I've talked about Exceed And Excel. He has become a foundation sire for us. His son Sidestep is sought at the Kelvinside as well and sired the winner of this year's Golden Slipper about three weeks ago, Australia's richest two year old race.

Last week, Exceed And Excel's son Microphone won the prestigious ..... Sires' Produce stakes. He has therefore become, as I said, the foundation establishing the next generation's four-year operation in the Hunter Valley. Without putting too fine a point on it, no Kelvinside, no Street Cry, no Winx, no Microphone, no two year old winner of the Golden Slipper. So what of the future – what do we see for future generations of horses and people who have become players on the world stage? With our region covered in coal expiration licenses, we engage in a constant battle to protect our patch. We listen to the government talking about the importance of prime agricultural land, its commitment to the high level of protection, its recognition of critical industry clusters. We were engaged in a strategic land use policy and the mapping process for the Upper Hunter that was supposed to identify and protect our industry. However, nothing changes.

For all the legislation policies that promise protection, the recognition of the centres of excellence, the mapping of critical industry clusters, the acknowledgment of sustainability and intergenerational employment and equity that we supply, on the other side of the ledger is the continued presence and creep of exploration licences and the development approvals across the region, indiscriminately placed licences made without effective regard and with historic planning decisions that take no proper account of neighbouring stakeholders, competing land uses, agricultural industries and ongoing land use conflicts.

So what about this application, the Dartbrook modification number 7? A development approval for an underground mine was originally issued, as you've heard, in 1991 and modified in 2001 and this, of course, self-evidently is the seventh proposal for modification. The early development approvals for this mine raised significant community concerns. They were put before two previous commissions of inquiry. I believe that these were fundamentally premised on the recognition that aboveground transportation of coal was expensive, environmentally damaging, and visually and environmentally intrusive. Basically, the initial approved proposals represented as low impact mine operations.

For these reasons, to gain a social licence to operate, and to meet the environmental and social and community objectives, the original proponent, Royal Dutch Shell, a subsequent owner Anglo, committed to construct and operate a subsurface corridor known as the Hunter Tunnel – and I will return to that point. This modification

number 7 is of significant concern to Godolphin. As the proponent itself acknowledges in its SIA, the nearest horse stud is our international scale, internationally renowned, horse stud at Kelvinside. The proponent places it 1.2 kilometres from the east site where the existing infrastructure is located.

5

The Dartbrook site is also at the entrance to the Upper Hunter Shire, the gateway to the horse capital of Australia and the area with Australia's most significant breeding farms. In Australia and in some of the world's most prestigious studs indeed ..... boasts studs for all horse breeds. This area has continued to develop and produce champion stock whilst this mine has laid dormant. The horse industry continues to develop on a base established well before this mine was even conceived. Having acknowledged this proximity, the proponent makes no attempt to understand, assess or quantify adequately, or at all, the impacts, including cumulative impacts of this proposal on our immediate communities, the businesses of the Hunter equine critical cluster or the cluster itself.

10

15

An assessment of the impact of this proposal on the equine CRC is totally absent from the proponent's SIA. This is despite the fact also that five previous PACs, as you've heard, have recognised that international scale thoroughbred breeding operations and mining operations are incompatible land uses in close proximity. The concerns about and concessions in recognition of the intrusiveness and environmental damage which were apparently recognised by previous owners of this mine, and previous consent authorities, when development consents were granted have apparently been discarded. This proponent seeks to walk away from what apparently was a central tenet – a central factor aimed at addressing impacts – the Hunter Tunnel.

20

25

Instead it now seeks to reopen the mine, but not the full tunnel, thereby increasing all environmental impacts. Why? Well, it seems because it seeks the apparent benefits of accessing the coal resource without committing the funds towards the reopening of the tunnel. Instead it seeks to further scar the landscape, increasing environmental impacts by bypassing all but a small section of the Hunter Tunnel, and introducing 192 trucks per day, decreasing visual and noise amenity, and critically adding to the PM tenant PM2.5 loads.

30

35

With respect, this is not a proper basis for allowing this to occur. There's none. Instead, AQC comes to the community with a proposal which are costs savings for AQC but clearly increase the environmental impacts and the burdens on the community. On balance, where is the benefit for the community? I suggest there is none.

40

In terms of the environment, in particular the Hunter's air quality, we have passed the tipping point. This has been a strong theme today. Why should any additional impact be allowed when, even on a cursory analysis, there is already dangerous levels of air quality and imprecise measurement and analysis? There has been no assessment of greenhouse gas impacts and the SIA is clearly inadequate. Proper and

45

robust analysis shows that it will place at risk our water systems upon which we rely and are the lifeblood of our industry.

5 Our water supply systems are already stressed and threatened as a result of mining operations. The failure to adequately assess the water issues is alarming, especially against the background of the severe drought conditions we endure and undoubtedly will continue to endure. This is particularly the case for groundwater impacts, the water balance assessment and the proposed reactive approach which risks irreversible damage to this vital resource. There is no meaningful understanding of  
10 the impacts revealed in the proposed application.

In terms of the economic benefits, this modification will result in negative social benefits to Australian and New South Wales economies. We will be worse off if this modification is approved. Mr Carr and Mr White will explain this. I suggest they  
15 have done so dispassionately, conservatively and with proper, robust expert vigour. We can't reconcile how this mine, considered operationally and geologically difficult by experienced miners, can deliver the product at the price and to the qualities suggested by the proponent, one who has no previous mining experience. The prior  
20 owner, Anglo American, with a reputation of one of the best underground mining operators in the world, chose to mothball this mine, preferring to pursue development of its Drayton South resource before selling both.

The proponent's own JORC, published to the ASX in March 2017, makes it  
25 abundantly clear that underground mining at Dartbrook is not viable as a standalone project. Based on the expert advice provided to the HTBA, we are particularly concerned that the Department of Planning report lacks proper, robust analysis of the proponent's claims and wades through this application without proper regard to the serious socioeconomic and environmental impacts of this proposal.

30 The evidence presented today by experts that are retained by the HTBA, on the other hand, is robust. It clearly exposes the inadequacies of the assessment and, therefore, the project. If this Dartbrook modification proceeds, the impacts, well researched and documented by people far more qualified than me, will be significant, irreparable and irreversible. For our industry, the risk is that it will intensify any lack of  
35 certainty of investment, confidence in the Upper Hunter Valley, could trigger events that will irrevocably change our commercial and environmental landscape and the equine critical industry class as we know it today will fragment, with the strengthening of other breeding areas through the diversion of investment and confidence. This is no idle statement. The march of mining and the constant  
40 approvals - - -

PROF LIPMAN: Thanks, Ross. Are we more or less - - -

45 MR COLE: Two paragraphs.

PROF LIPMAN: Can you wind up, please.

MR COLE: Despite the opposition of the local community and iconic industry like ours, has made a strong and stark mark already. We need to draw the line, listen to the science and the economics. We need to take in the environmental hazards posed by this modification and apply government policies for protection and diversification of New South Wales that the government so readily espouses. At the very least, we urge that the precautionary principle be applied. On the strength of the independent and robust scientific and technical evidence before you, our industry and the community's position, contrasted with the inadequacies exposed in the proponent's and the department's analysis, we respectfully submit that the Dartbrook mine modification 7 on all counts is not in the public interest and should be rejected. The department and the proponent's assessment is wrong. It's the wrong mine in the wrong place. Thank you.

PROF LIPMAN: Thank you, Ross. I will have to trespass on your patience. We have been provided with a short video by a colleague of Mark Webster, so we will watch that before we wind up today. Thank you.

MR M. WEBSTER: Commissioners, thank you for the opportunity of speaking to you today. My name is Mark Webster. I'm the managing director of Liam Neilson & Son, the company that has been serving the racing and breeding industry ..... Australia for the past 152 years. That company has sold many great racehorses that have dominated the tracks here in Australia and around the world, and I'm speaking to you today because I'm very concerned about the proposed re-opening of the Dartbrook Mine in the Hunter Valley in the centre of what is a very important breeding industry for Australia.

As you are aware, today is the first day of the ..... which is held every year at this time in Sydney. This sale is one of several premium quality sales that are held each year across this great country, but it is the most important in terms of shaping and serving our racing and breeding industry. Our role is to assist the thoroughbred breeders to sell their produce and keep them in business. Last year, the Easter sale generated 120 million in turnover. Approximately 80 per cent of the horses that are sold in the Easter sale each year come from the Hunter Valley.

In 2017, an independent survey of the Easter sale was conducted. It revealed that the sale generated in excess of \$83 million in economic benefit for New South Wales in addition to generating sales income for the breeders to keep them in business. The Easter sale attracts thousands of visitors to Sydney each year. In 2017 when the sale was last measured, it generated 14,000 ..... in the Sydney Basin. Inglis also conducts other horse sales in Sydney and in Scone and in Melbourne. Approximately 50 per cent of the spend at the Easter sale comes from international investors. Typically, half the ..... export the horses that they purchase in places like Hong Kong and China, New Zealand, South Africa and Singapore, and the other half keep their horses here in Australia to race which further adds economic benefit and creates more jobs for the locals.

My team spent many months traveling around the world to identify and attract international investors to Australia. Now, aside from purchasing racehorses here, many of these international investors see the potential to invest in rural property and breeding operations here in Australia. Inglis is also a licensed rural property sales agent, and over the past five years, I have witnessed the negative reaction from international investors to the impact of coal mining in the Hunter Valley. The significant blight on the Hunter Valley landscape with the dust and the visual amenity is very off-putting when they visit.

When such investors undertake due diligence to consider regions right across Australia for their investment, they identify the uncertainty of planning regulations in the Hunter Valley and the current high level of mining as significant risks. I estimate that at least 80 per cent of new investors of the past 10 years that we've engaged with – and I have personally – have given us a brief to find a property in Victoria or in other parts of New South Wales rather than the Hunter Valley, and this is quite concerning for the future of this important industry. As you're hearing this is on the same day as the Easter ..... sale here in Sydney. We can't be there in person to directly convey our deep and strong opposition to the commissioning – to the recommissioning of the Dartbrook mine. We appreciate the opportunity to lodge submissions. However, seeing is believe, and nothing substitutes for hearing our concerns first hand.

With me here today at the Easter sale include captains of industries such as Arthur and Harry Mitchell of Yarraman Park, Newgate's Henry Field, Tom ..... of Coolmore Stud ..... Aushorse chairman Andy Thompson ..... MD ..... Cox and of course celebrated racehorse trainers including Gay Waterhouse, the Cummings family and Chris Waller, the trainer of the great Winx and English board members and shareholders Arthur and Jamie Inglis, both, of course, fifth generation members of the racing industry.

Everyone present here today at the Easter sale stands with me today in opposition to the re-opening of the Dartbrook Mine. There are several key reasons why we're opposed to this. Firstly, the government has recognised the Hunter Valley as one of the most fertile and productive agricultural areas in New South Wales, and the ..... thoroughbred breeding industry as an internationally and state significant industry, the centre of thoroughbred breeding excellence and a critical industry ..... and, of course, one that should be afforded heightened protection.

There are already too many mines in the Upper Hunter impacting on air quality and water systems, our landscape, our visual amenity, investment uncertainty and our industry's reputation for producing champion racehorses in a clean, green and serene environment. The proponent's own statements and reports reveal that, firstly, the proposal as a standalone underground mine is not viable. The proposal is only viable if the proponent subsequently implements open cut mining at Dartbrook, and the proposal will take the Upper Hunter beyond what is accepted as safe according to the New South Wales air quality and noise standards.

15 This terrible mine was shut down and mothballed by ..... American 13 years ago for  
very good reasons including spontaneous combustion and health and safety issues.  
We have no confidence that an inexperienced proponent with no previous experience  
in underground coal mining can operate this mine safely or in line with current  
5 environmental standards. The proposal does not have local council support or  
confidence. Commissioners, a lot has changed over the past 13 years that this mine  
was last open. Firstly, there are more mines now open in the Hunter Valley.  
Communities and governments are now more aware today of the impacts of mining  
of the environment including land uses, community wellbeing and cohesion.

10 Government policies recognise the importance of diverse, strong, regional economies  
based on sustainable long-term industries and not allowing one industry to dominate  
or to wipe out other industries. We strongly oppose this proposal because it has the  
potential to seriously damage the health and good reputation of one of the world's  
15 most important and successful thoroughbred breeding nurseries in the Upper Hunter.  
The re-opening may impact the broader racing industry and economy. The re-  
opening may cause significant damage to one of Australia's most important export  
industries. We compete with the USA and Japan and Europe in the export markets  
and is one of the few export industries that Australia still has, and we need to protect  
20 it. Commissioners, for all of the reasons that I've outlined above, we ask that you  
reject this proposal and take action to protect the Hunter Valley as one of the world's  
most important thoroughbred breeding nurseries.

25 PROF LIPMAN: Ladies and gentlemen, I would like to thank you very much for  
your participation today and for your civility to other speaks and your adherence to  
the time limits. Overall, we've finished within time, and I think it has all gone very  
smoothly and I thank you all for that. Before I close the meeting, are there any  
questions about our process that anyone has, or has everyone got a clear indication of  
what happens next?

30 MR .....: When you submit a statement on the website, do you get an email  
receipt or something to tell you that it has been accepted, because - - -

35 MR JAMES: No, but it will go up online, so when it does, that will be visible, but  
you would like acknowledgement?

MR .....: I just wasn't sure whether it went in, so - - -

40 MR JAMES: Okay. Was that your comment on the proposal?

MR .....: I put a comment in a couple of days ago, but you don't know whether it  
goes through?

45 PROF LIPMAN: Well, I – we would like, you know, as many people as possible  
who spoke today, it would be very useful to have a written copy of your submission,  
and if you also have anybody who hasn't spoken today wishes to make a submission,



we can take submissions for a further week, and they will be placed on the website as well, so yes.

5 MS .....: Commissioner, what's your timing from this point forward in terms of  
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10 PROF LIPMAN: I don't think we can really state with any clarity at this stage,  
because it depends on the submissions that come in and any investigations that we  
have to complete, but we've been endeavouring to finalise it as soon as possible.  
Well, thank you very much again for your participation.

**RECORDING CONCLUDED**

**[6.01 pm]**