

MR HANN: All right. Well, look, just some formalities, as I know you're used to now, and then we can proceed proper with the briefing. So good afternoon and welcome. Thanks for making yourselves available. Before we begin, I would like to acknowledge the traditional owners of the land on which we meet, and I would also
5 like to pay my respects to their elders, past and present, and to the elders from other communities who may be here today. Welcome to the meeting today.

Vickery Coal Proprietary Limited, a subsidiary of Whitehaven Coal Proprietary Limited, the applicant, is seeking development consent to extend the Vickery
10 approved project and develop a new CHPP and train load out facility at the Vickery coalmine. The project also proposes to develop a rail spur across the Namoi River floodplain and includes a water supply borefield and associated infrastructure. The project is located in both Narrabri and Gunnedah Local Government areas. My name is John Hann. I'm the chair of this IPC panel. Joining me are my fellow
15 Commissioners, Professor Zada Lipman and Professor Chris Fell. Steve Barry and Brad James from the Office of the Commission are also in attendance.

In the interests of openness and transparency and to ensure the full capture of information, today's meeting is being recorded, and a full transcript will be produced
20 and made available on the Commission's website. This meeting is part of the Commission's decision-making process. It's taking place in the early stages and will form but one of several sources of information upon which the Commission will base its decision. It is important for the Commissioners to ask questions of those in attendance and to clarify issues whenever we consider it appropriate. If you are
25 asked a question and you're not in a position to answer, could you please – or feel free to take the question on notice and provide any additional information in writing, which we'll then put up on the website. So in regard to today's meeting, the electronic meeting, could you please introduce yourselves each time you speak. Normally in a face-to-face meeting, it's just the first time, but so this works clearly
30 with the transcript, if you could please introduce yourselves every time you speak, and just in terms of the sequencing, if we can just eliminate speaking over the top of each other, make it to an absolute minimum so we get some accuracy in the transcript.

35 So having said that, Paul, I think I understand you've got a brief presentation for us, so would you like to lead with that, and then we can commence the briefing thereafter in terms of any detail.

MR FLYNN: Thank you, John. And for the record, should I introduce myself and
40 our attendees here as well? I'm Paul Flynn, CEO and managing director of Whitehaven Coal Limited. I'm joined by our executive general manager of project delivery, Mark Stevens, and I'm also supported here today by Mark Brennan from Ashurst and James Steele from Resource Strategies. I'd also like to acknowledge the traditional owners of the land in which we meet, in this instance, the Gadigal People
45 of the Eora nation, and pay our respects to elders past and present. We do have a presentation, as you've mentioned, John, and I propose to move through that and,

with your blessing, do that directly and then move to questions and answers. If you would prefer, we can make it more interactive with questions throughout the presentation, but there is a bit of ground to cover. It may lend itself a little better to a straight presentation and then a separate section for Q and A.

5

MR HANN: Thanks, Paul. Look, it's probably – we're guided by you, but if you feel that it will be smooth and more efficient, then please, make your presentation and then we'll go to specific queries/questions/comments thereafter.

10 MR FLYNN: All right. Thank you. I'll proceed directly with the presentation and assume that we'll have questions at the end, unless, of course, one of the Commissioners has a burning question that they'd like to level during the course of the presentation.

15 MR HANN: Okay. Thank you.

MR FLYNN: So thank you once again for the time, and I appreciate the opportunity to make our presentation today as the proponent, and also I appreciate also the time allocated by the IPC to site visitation as well and trust that that was both useful
20 context and informative.

UNIDENTIFIED FEMALE: Sorry, just in terms of the presentation, could you enable participant screen-sharing, please?

25 MR FLYNN: John, just checking that that is up on your screen now.

MR HANN: Sadly, no.

MR FLYNN: All right.
30

MR JAMES: Brad speaking. It's coming up on mine.

PROF LIPMAN: I've got an excellent picture.

35 PROF FELL: I've got it, thanks.

MR HANN: Yes.

MR FLYNN: John, you remain without the picture?
40

MR HANN: Yes. For some reason, that has not occurred. It's indicating that I am on screen-sharing, but it's not giving me any visibility, I'm sorry.

MR FLYNN: Right. We're sharing with you as opposed to you sharing with us.
45

MR HANN: What should I be looking at?

MR FLYNN: You should see now a slide entitled, Australia's Largest Independent Coal Producer.

5 MR HANN: No, sorry, I'm not getting that.

MR FLYNN: So you're just visually seeing us.

MR HANN: Well, now you've actually disappeared now as well, sorry.

10 MR FLYNN: Okay. Perhaps we will collapse the video, if that changes thing.

UNIDENTIFIED MALE: I think Brad said he could see it.

15 MR FLYNN: Yes.

UNIDENTIFIED MALE: Yes.

MR FLYNN: So Brad, you can see the presentation?

20 MR JAMES: Yes, it's clear.

PROF FELL: It's clear to me.

25 PROF LIPMAN: Clear to me, too.

MR HANN: Look, my apologies. What's our workaround for this?

MR FLYNN: Perhaps if we could email a version directly - - -

30 MR HANN: That will be fine. If you could do that, then I can pick that up.

MR FLYNN: Right. We will - - -

35 MR HANN: Rather than interrupt the process. Obviously, I've got some problem here, but if you could email that to me, I'll pick that up now.

MR JAMES: Yes. Paul, if you send that through to me, I'll forward it through to the panel.

40 MR FLYNN: Ksenya is doing that directly, Brad.

MR JAMES: Great.

45 MR HANN: All right. Actually, technology has suddenly burst through and I am in business.

MR FLYNN: Right. Fantastic.

MR HANN: Yes.

MR FLYNN: All right. Then I will proceed, then. Thank you.

5 MR HANN: Thank you, Paul. Sorry for the delay.

MR FLYNN: No, not at all. Not at all. These things happen. Thankfully, there are better people than me who can solve these things, so if you had depended on that, you would have been in real trouble.

10

MR HANN: I think that's pure luck, but anyway, on my part.

MR FLYNN: Right. So I'll go through our presentation now, if I could. So firstly, a brief overview of our business. We are Australia's leading independent producer of premium-quality coal. All our operating assets are based in the Gunnedah Basin, as you will know, three open-cut mines and one large, underground mine. Of course, the Vickery Project you're well aware of is in the Gunnedah Basin as well, and we have, in the last couple of years, purchased another large-scale development asset metallurgical deposit in Queensland Bowen Basin, which is entitled Winchester South.

20

Turn over to the page. And over our 20-year history, we've certainly grown significantly during that period, in the last decade, in particular, with the Narrabri underground mine coming onstream and Maules Creek online as well. This growth in production has been accompanied by a growth in our workforce, quite a significant growth, and the majority of our people live in the area around our operations, and we're the largest private sector employer in the region. Now, we are proud of the social and economic contribution that we've been able to make over that past decade in particular, and importantly from our perspective, this increase in production has been coupled with a commensurate improvement in our safety record over this period, as evidenced by the TRIFR curve, the brown line that we've got on that graph.

25

30

The Gunnedah Basin is synonymous with high-quality low-ash, low-sulphur and high-energy coals. It is the best thermal coal available in the seaborne trade, and it also produces a low-sulphur, low-phosphorus, low-ash, semi-soft coking coal for steel markets in Asia. So those two products, the thermal coal, does enable a lower-emissions outcome for energy generation in Asia and, with the metallurgical coal, is a key input to the steel-making process, amongst other applications. All of our customers are signatories to the Paris Agreement, or have equivalent domestic policies, such as Taiwan.

35

40

We believe the benefits of our operation should extend beyond our workforce, and we seek to leave a positive legacy that endures past the peak of mining operations. Our community and social compact starts with identifying and developing a very high-quality, long-life assets. Those long-life projects underpin the economic growth and sustainability and fuels long-term job creation. We focus our procurement

45

efforts locally so that there is an active business stimulus coming from our spend. The intergenerational nature of the investments allows us to build not just jobs and skills, but also infrastructure that serves the community through the good times and more challenging times. How we behave determines how we are perceived as a
5 responsible member of the community, particularly in our environmental stewardship and the various community programs and partnerships, which I'll refer to later.

We offer sustainable, long-term, rewarding career opportunities in regional Australia. We invest in skills development with a strong focus on creating pathways for young
10 people to remain in the local region. Our long-life assets and human resource-intensive nature of our business puts us in a strong position to continue to provide meaningful opportunities to the region. We do not support a FIFO workforce, with the bulk of our people living in and being part of the community in our local area. In terms of diversity, the proportion of our workforce that is female aligns with the
15 coalmining industry average, although there's always more work to be done, and that has been improving in recent years, and we are very proud of the work in addressing indigenous disadvantage, which includes concerted efforts to ensure the proportion of people in our workforce who identify as indigenous reflect the community more broadly.

20 And on that particular aspect, I might highlight further efforts to you because it is a focus for our business. We do take a holistic approach in addressing indigenous disadvantage through job creation and training, supporting families and their children in the early stages of life through organisations such as Winanga-Li Early Learning
25 Centre in both Gunnedah and Narrabri. We support school-aged people through the Girls Academy in Gunnedah and the Clontarf Academy in Narrabri, and both programs have done excellent work in keeping young people engaged in school and improving their post-school education and work opportunities. For many, that means employment in Whitehaven, and we're also building our base of indigenous suppliers
30 so, again, the benefits extending just past employment and into now some 20-odd relationships with indigenous businesses in our area.

Again, we're able to make a significant contribution to the northwest of New South Wales, and I'll just call out a couple of numbers in particular. Obviously, the means
35 by which we make that impact is local procurement, wages, community partnerships, as I've mentioned, and, of course, our payments to councils and State Government. In FY19 we spent about \$330 million in local procurement, and "local" being defined between Tamworth and Narrabri. About 200 businesses shared that \$330 million, quite a significant proportion. And then another large number there. You
40 can see just to the right in that graphic is over \$320 million that we paid in FY19 across Federal/State/Local Governments in taxes and royalties.

We hope that our value proposition in the company resonates with the community at large, and to test whether that's the case, we do take independent qualitative and
45 quantitative sentiment testing in the region, and approximately every 18 months, and we just recently received the results of the latest round of that. This is independent, statistically significant polling which has been taken since 2015, which tells us that

net sentiment has trended up, meaning that we're viewed more positively than negatively across those communities, and you can see that it's taken quite a jump from a net 16 back in 2018 to a net 28 in this most recent poll. And if I can call out just a couple of the features of the polling, rather than going through it all. Say, for instance, if we agree – the question of – with the broader community of mining as an industry, 62 per cent agree that the local mining industry will help strengthen the local economy in the wake of coronavirus. I think that's very important. On the Vickery Extension Project itself, those neutral, somewhat supportive and strongly supportive, in aggregate, total 70 per cent, which is up from 64 per cent in 2018. On Vickery and in the Gunnedah LGA in particular, where a good portion of our local workforce reside, 88 per cent agree mining jobs are essential to the local community, and 76 per cent, again, from neutral to somewhat positive and to strongly positive, view the Vickery Extension Project as being important in the LGA.

So on to the Vickery Extension Project itself. On this slide there are two graphics. Here are the footprints for both the historical mining on the left-hand side and the approved – currently approved mine on the right-hand side. Mining began in 1986 with a small underground operation that continued until March of 1991, and from 1991 to 1998, coal was extracted through three additional open-cut areas, depicted on the left-hand side. Our first operations on the site were associated with the Canyon Coal Mine located in the northern part of the coal lease. Canyon was operational between 2000 and 2009. The approved mine on the right – you can see that the green line outlines the Vickery south tenement, representing the proposed extension to the Vickery Coal Project. The Vickery south tenement was granted by the government to a company named Coalworks in 2009. Whitehaven acquired Coalworks by public acquisition in late 2012 and was completed in 2013.

The increase in coal associated with the Vickery Extension Project is a product of the incorporation of the Vickery south tenement. As you know, the project is an extension of an existing approved mine, with the – in this graphic, the extension areas marked in yellow. The southern area is the extension of the open cut into the Vickery south tenement, as I've just mentioned, and the northern extensions are associated with extended waste and placement areas and ancillary infrastructure for dams. The orange line on this graphic is the project rail spur which will connect the mine industrial area to the main line. Once the rail line and onsite CHPP are established, there'll be no further trucking of coal by road from our existing CHPP on the outskirts of Gunnedah. This will take approximately 320 truck movements per day off the road, and obviously, our Gunnedah prep plant will be moved up to site in Vickery, liberating some valuable land for industrial purposes closer to town.

The blue line shows the alignment of the borefield and its associated pipeline. The borefield is a new component of the project, and it's proposed to improve the water security of the project. The last component of that I haven't mentioned is the black hatching area, which is the Blue Vale pit. That was originally included as part of the proposal, but was removed when we saw community feedback on the inclusion of this area. We thought that was an appropriate thing to do before we configured and submitted our DIS.

The Vickery Extension Project represents a significant improvement in social and economic benefits compared to the improved mine. I won't run through this long list of aspects here, because they are numerous, but production of the mainly metallurgical coal from this site will be complemented by also very high-quality thermal coal. In fact, from a coal quality perspective, the Vickery Project represents the best coal quality our company will have at our disposal from the Gunnedah Basin. The extension project increases employment compared to the improved mine, with some 500 jobs during construction and approximately 450 high-paying operational roles. Developing the project will also entail capital expenditure of more than \$600 million, and as I've mentioned before, many of which finds its way into the hands of local businesses. The project will deliver significant royalties to the State Government, approximately \$650 million over the life of the mine in NPV terms.

Compared to the approved project, the extension project will have a number of environmental benefits. As I mentioned, the project rail line will take all trucks off public roads. The rail line and onsite CHP will improve the community amenity by decommissioning our existing CHPP in Gunnedah, and the increased annual production will improve mine efficiency and reduces the overall life of the mine from 30 to 25 years. The extension project is also designed to progressively fill existing voids in the landscape, resulting in an overall reduction in the final voids from the current number of five from historical mining to – down to two voids: the existing Blue Vale pit, which is outside the scope of VIS, and, of course, the final void from mining of the extension project. The project borefield improves water security, and the project can operate with no increase in the number of noise or air quality-affected properties over and above the existing approved mine. And the mining operations move no closer to the Namoi River, and the mining area does not impact the Namoi River floodplain.

I'd like to move over to page 15, thank you, and I'd like to briefly review the key actions that have taken place since we last met in early 2019. The IPCs issues report was released in April of '19, following the initial public hearings in Boggabri and Gunnedah. We lodged a submission report in August of 2019, which responded to the submissions received during the EIS public exhibition period and the IPC initial public hearing process as well as the issues raised in IPCs issues report. The submissions report includes additional analysis of modelling in response to the queries from government agencies, DPIEs independent experts in the fields of groundwater flooding, surface water, economics, the community and the IPC itself, and we've continued to engage with community and important stakeholders throughout this entire period. Importantly, we've agreed a planning agreement with the Gunnedah Shire Council, and a similar and related offer remains open in the hands of Narrabri Shire Council.

As the Commission would be aware, the project's environment assessment has undergone multiple stages of review through the EIS, initial IPC public hearing process, and then submission reports phases. The outcomes of the assessments processes demonstrate that the project can be operated consistent with government

policy and legislation, and we've listed key aspects demonstrating that here in the list above. It's important to note that it's not the view of Whitehaven that these other outcomes from studies and reviews from EIS specialists and peer reviewers, the government agencies, DPIEs reviewers and DPIE themselves, culminating in DPIEs assessment report and its recommended conditions of approval.

The whole of government report, of course, was released recently. The report concludes that project has achieved a reasonable balance between maximising the recovery of a high-quality coal resource of state significance and minimising the potential impacts on surrounding land users and the environment as far as practicable. We note the recommended conditions of approval were accepted by key government agencies and are considered by the department to reflect current best practice of regulation of open-cut mining operations. Whitehaven accepts the DPIE assessment report recommended draft conditions of approval.

As I've already discussed, the project has been assessed comprehensively. The outcomes of this assessment process are documented in DPIEs assessment report. Nonetheless, we recognise that there may be residual areas that may be of concern to some stakeholders. We would like to use this opportunity to outline the key assessment findings for some of these areas and answer any questions that you may have. We note IPC did not have any specific questions in advance of the hearing. However, we request that should there be any questions that arise through the remainder of the determination process, particularly for matters that may be material to the decision-making process, that Whitehaven be made aware of these questions and given the opportunity to respond or provide clarifications. We know the department consulted with various parties during the preparation of its recommended conditions. If the IPC proposes to make any changes to the department's draft conditions, we request the opportunity to review the changes and provide comment on them on their workability.

I'll move on to water security. Now, understandably, water availability is a key concern for local agriculture and businesses, including Whitehaven. Indeed, water security is something we manage within the relevant government frameworks on a daily basis through all of our operations. Thankfully, in 2020, rainfall has been above average. However, our region experienced severe drought conditions during 2018 and 2019. Despite these drought conditions, all of Whitehaven's mines operated throughout 2018 and 2019. The experience during this period changed our water management practices across our operations. We implemented significant water monitoring and efficiencies that can be applied to Vickery, but are actually not included in the EIS modelling. The site water balance modelling of the project has considered the full range of conditions, including periods where no water is available in the Namoi River, and the model has been updated to include 2018 and 2019 rainfall conditions, so the range of data considered now is actually 1889 to 2019. Now the modelling considers multiple historic and contemporary drought periods, including periods where no water is flowing from the Namoi. The EIS modelling indicates the peak water demand for the site would be around 2000 megalitres per annum at full production. However, the EIS water balance modelling did not take

into account the benefit including our recent operational experience and learnings and water-saving initiatives, which will reduce water demand during extreme dry periods when compared to what has been modelled.

5 For Vickery, the hierarchy of water supply options to meet operational demands is, firstly, (1) water captured onsite in the open-cut mine water dams and sediment
dams; (2) licensed extraction from the Namoi River; and (3) licensed extraction
10 from the project borefield. The inclusion of the borefield as part of the project improves water security from day 1, particularly during periods of low or no flow from the Namoi. In any case, water balancing modelling results do show that during the driest conditions, Whitehaven will likely need to rely on licensed groundwater
extraction to meet its water demands, and additional licence may need to be acquired
15 on the open market. Government records show that between 5000 and 7000 megalitres of zone 4 alluvial groundwater licences were traded in the market in financial years 2019 and 2020. This is significantly greater than the maximum water
demand for the project. This trading record and our experience from our other
operations shows there's significant depth to the market and that licences can be
obtained as required.

20 The groundwater models have also assessed extraction from the project borefield at a rate exceeding 2000 megalitres in a single year. The rate of extraction is predicted to comply with the aquifer interference policy and the requirements of the water-sharing plan. Once development consent is granted, the process of trading zone 4
licences will be regulated by NRAR and DPIE Water under the Water Management
25 Act, as it currently is, and that we are working with it. The project site water balance has been reviewed by independent surface water experts and the government, and the recommended conditions require Whitehaven to hold sufficient licences to meet operational demands and, if necessary, adjust operations to meet available water
supply. We accept this recommended condition.

30 The open cut is wholly located within the geology associated with the porous rock of the Maules Creek formation, which is surrounded by the highly productive alluvium – Namoi alluvium. The minimal impact criterion under the aquifer interference
policy is a drawdown of less than two metres. All bores in the highly productive
35 alluvium comply with the minimum impact criteria during mining and post-mining. This includes the cumulative impacts of mining operations and the extraction from the project borefield. We hold licences to account for groundwater inflow into the open cut, and additional analysis was undertaken as part of the submissions report to demonstrate the final void would behave in a – as a groundwater sink. The final void
40 is considered to be superior to alternative final landforms, such as partial backfill of the void, and the final void will prevent the migration of poorer quality groundwater moving towards the alluvium. Complete backfill of the void is not economically
feasible. It should be noted that the project is an improvement on the approved mine, as it will reduce the number of voids, as I've mentioned, in the post-mining
45 landform. We hold sufficient licences to account for the post-mining inflows into the final void during the recovery period. And finally, the groundwater model has been independently peer-reviewed and considered to be fit for purpose.

As we can see from this figure, a small portion of the western emplacement overlaps the regionally mapped alluvium. The figure also shows the Canyon Mine, which is the dotted black line. Waste from Canyon was previously emplaced in this section of the alluvium. A portion of the current Canyon void also sits within the regionally mapped alluvium. The extension project will fill the existing Canyon void, removing it from the landscape. This can only occur through the emplacement of waste in this section of the alluvium of the extension project. The dominant direction of groundwater flow through the waste emplacement is towards the proposed extension project void and away from the alluvium. Minor seepage towards the alluvium may occur, and this has been assessed as having no adverse effects on the quality of the alluvium. The government has recommended monitoring to confirm that this is the case, and we accept that condition.

As you may know, the area has been extensively cleared with past land uses, including mining and agriculture. In addition, a significant portion of the project is the footprint of the approved mine, and therefore, the total disturbance is a culmination of the approved mine and the project extension areas. As noted by DPIE, the extension areas have avoided biodiversity impacts where possible, including avoidance of threatened ecological communities and patches of higher-value vegetation.

The proposed [.....](#) will be offset in accordance with the government's requirements that include, for the approved mine, offsets will be located on properties owned by Whitehaven, as previously approved. For the extension areas, the additional offset credit liability has been calculated in accordance with the New South Wales framework for biodiversity assessment, and the assessment credits will be retired under the mechanisms allowed in the Biodiversity Conservation Act, which includes land-based offsets, onsite ecological rehabilitation, and payment to the Biodiversity Conservation Trust Fund. The figure on the right-hand side shows some of the project's offset areas which are located close to the project site. The green boundaries are the offset properties that have been approved as part of the approved mine. The pink boundaries show proposed additional offset areas of the extension project, and as can be seen here, the overall strategy involves creating a corridor of woodland extending from the ridgeline on the eastern extent of the figure back to the Namoi Valley riparian corridor.

Surveys of potential koala habitat have been completed, and core koala habitat is shown on this figure in the marked area in blue. It's a small area just down there by the rail alignment. The project avoids impacts to core habitat, as far as possible, by locating the rail crossing to avoid mature trees. Approximately one hectare of core habitat will be disturbed by the rail. The orange lines are mapped potential koala habitat within the project extension areas. The extent of habitat has been confirmed with the government's review of the EIS and the disturbance to the potential and core koala habitat will be offset as part of the offset strategies summarised in the previous slide. In addition, we have prepared a koala plan management and provided this to DPIE. As outlined, additional management measures for koala habitat, which include restoration of the red river gums and koala feed trees within the rail corridor.

These works and plantings will occur when practical. The recommended conditions of approval require the koala management plan to be approved before construction activities commence.

5 I move to page 26. Now, just – Kurrumbede has associations with, obviously, the
poet Dorothea Mackellar. The property was previously owned by Coalworks and
was acquired by Whitehaven as part of the Vickery South acquisition. The
homestead is currently tenanted and the property leased for agricultural purposes.
10 The homestead is not listed on any state or local heritage register. However, there is
a pending application for it to be listed on the state heritage register. If this listing is
successful, it would not change the assessment of the homestead as DIS heritage
assessment recognised the homestead meets some criteria of state significant
heritage. Accordingly, our commitments with respect to the Kurrumbede homestead
include a preservation of the homestead, including an allocation of \$500,000 to
15 restore and preserve the gardens of the homestead, no direct disturbance, with
indirect impacts from blasting managed by a blast management criteria, and ongoing
monitoring to avoid building damage. Ongoing maintenance, of course, over the life
of the project and a partnership with the Dorothea Mackellar Memorial Society, and,
of course, from time to time, community access. The details of these commitments
20 will be outlined in the conservation management plan. We note that DPIE and New
South Wales Heritage Council support the proposed management measures, as stated
in DPIEs assessment report.

25 Moving to employment. The project would result in direct employment, as I've
mentioned, of 500 jobs during construction and about 450 operational roles. These
job numbers are based on our experience with Mauves Creek, which currently
employs more than this. The project direct employment expenditure would flow on
throughout the community. The estimate of around 170 indirect jobs in the EIS was
low compared to the government's estimate of around 1800 indirect jobs. DPIEs
30 assessment report notes the employment estimates appear reasonable.

Over on page 28, the planning agreement with Narrabri Shire Council and Gunnedah
Shire Council for the approved mine were agreed, and outcomes of this are reflected
in the development consent conditions. For the approved mine, the VPA totalled
35 \$7.5 million and was split 70-30 between the Gunnedah and Narrabri Shire Councils.
The majority of the site is within the Gunnedah Shire. For the extension project, a
revised planning agreement totalling \$10.7 million was offered to the councils, 43
per cent higher than the approved mine, although the increase is only 24 per cent.
The increased offer maintained the 70-30 split, because that hadn't changed in terms
40 of the footprint between the two LGAs, and Whitehaven, as I mentioned, pleasingly
has agreed terms for VPA with the Gunnedah Shire Council, which is in the process
of execution as we speak. Our offer remains open to the Narrabri Shire Council.

45 I'd like to make a few comments just on demand for the project's coal. Our
investment decisions, not just for our existing operations but, of course, for the
Vickery Extension Project closely consider supply and demand for metallurgical and
thermal coals over the life of the project. We seek independent advice on short,

medium and long-term forecasts of coal demand, and the independent advice considers demand factors such as investment of steel-making facilities, power generation infrastructure in customer countries, as well as other factors such as technological change, population growth, economic development, and national emissions targets. The independent forecasts predict that ongoing demand will exist for the semi-soft coking coal and thermal coal over the life of the project, and this is certainly supported by our existing operations. This is particularly the case in Asia, where our existing customers are located. Our experience is that customers prefer the high-quality coal out of the Gunnedah Basin, and Vickery will assist in meeting their emissions reductions targets. Vickery's semi-soft coking coal is very low in ash content, resulting in higher blast furnace efficiency compared to others with higher ash contents. And Vickery's thermal coal has high calorific value, low ash and sulphur contents, and provides fewer greenhouse gas emissions per unit of energy produced. Our analysis, informed by the independent advice, indicates that demand for high-quality coal like Vickery's will continue over the life of the project.

The EIS – moving along to the slide now entitled Climate Change. The EIS has quantified the likely scope of scopes 1, 2 and 3 greenhouse gas emissions for the life of the project. Scope 1 and 2 emissions are associated predominantly with fugitive emissions, diesel and electricity consumption, and in-situ gas content of the project is low, and therefore, fugitive emissions from that source would be relatively low. Scope 1 and 2 emissions for diesel and electricity consumption, respectively, would also reduce as far as possible through energy efficiency initiatives implemented throughout the life of the mine. The larger scope of – source of scope 3 emissions is associated with the combustion of coal in steelworks and power stations by third parties. The likely customers are signatories to the Paris Agreement or have equivalent domestic policies, such as Taiwan, as I've mentioned earlier. And in regards to Australian policy setting, we agree with DPIEs comments that the New South Wales and Commonwealth Governments' current policy frameworks do not promote restricting private development as a means for Australia to meet its commitments under the Paris Agreement or the long-term aspirational objective of the New South Wales Climate Change Policy Framework Guideline. Both the Commonwealth and the New South Wales Governments have outlined a suite of measures to achieve their respective emissions targets. We do not consider the project would affect the Australian or New South Wales Governments' ability to achieve their emissions reductions targets. And as per the framework established under the Paris Agreement, it would be the responsibility of the countries that use the project's coal for steelmaking and power generation to achieve their emissions reductions targets.

We acknowledge the intergenerational equity is a principle of ecological sustainable development. The project's design has considered inter- and also intragenerational equity. In regards to intragenerational equity, current generations will benefit through employment, the stimulus of local and regional economies through capital and operational expenditure, and through the payment of royalties and taxes to governments. In regards to intergenerational equity, future generations will indirectly benefit through the investment in social welfare infrastructure during the

project's life. It should be noted that significant positive net benefits of the project to New South Wales of some \$1.2 billion are calculated net of environmental costs and externalities. This includes the costs of associated rehabilitation of the site, mine closure and post-mining impacts. These costs are to be borne by Whitehaven, and security of rehabilitation cost is provided by way of mining closure bonds paid to the government. And the potential for post-mining impacts have been considered in the EIS and can be summarised as follows. Zone 1/2/3 emissions attributed to the project will cease at the end of mining, and there'll be no bores in the highly productive alluvium with impacts greater than two metres drawdown, and groundwater licence will be used to account for any ongoing flows into the final void, as the approach is recommended in the aquifer interference policy. The final landform – project landform is an improvement, as compared to the approved site, as we've said, and portions of the site will be reinstated to agricultural land, with the remaining areas rehabilitated to native vegetation, and biodiversity offsets established for the project would maintain or improve biodiversity values in the long term. Accordingly, the project is considered to be consistent with the principle of intergenerational equity.

With that, I might draw our presentation to a close, John, and appreciate the time, and we'll hand over to you and the Commission for any questions.

MR HANN: Paul, thank you very much. That was very informative for us. What we would like to do is just go through a number of issues that we've – that we've identified that we'd appreciate some clarification. Can I just check that my colleagues are all online and can hear, subsequent to that presentation? Zada and Chris?

PROF LIPMAN: Yes.

PROF FELL: Yes, I'm online.

MR HANN: Good, thank you. Yes. Paul, if we might kick off with noise and, in particular, how you would intend to ensure you can operate within the recommended conditions that are particularly in relation to table 1 in the conditions. So that, off the top of my head, I think relates to residences 131 and 132, and there's a number of those sensitive receivers. But essentially, it relates to the VLAMP and the additional noise impacts related to that over the project noise trigger levels. So it's really a matter of how you're going to conduct the operation in relation to that, given that you've predicted some exceedances.

MR FLYNN: We have, and in this area, John, ordinarily, this is a matter for the operational disciplines within an actively managed mine, and certainly these are the predicted outcomes over time. And what we've learned from our other operations is that when particularly environmental factors are at variance on a particular day to the next, and particularly during winter periods, where temperature inversions are common in the area, we modify – we monitor, obviously, in real time basis and modify our operations, depending on the conditions that apply, so that, say, for

instance, if overburden was being moved over to an out-of-pit dump that had some elevation which aided the transmission of noise under those circumstances, we would move dumping locations to areas lower down within the project footprint. These are the type of initiatives we currently deploy at our other operations, Maules Creek
5 being a very good example of it, but certainly the same disciplines are actively managed across all of our operations.

MR HANN: Thanks, Paul. In relation to property 127, there are no specific conditions set. So what will be your operational approach there in terms of amenity
10 and particularly noise impact?

MR FLYNN: We do acknowledge that 127 is, obviously, within the zone of affectation of the project, and obviously has been conferred under the approved project acquisition rights. I think it's not the primary residence of 127, but one of the
15 workers' cottages, I believe, which actually triggered those rights under the approved mine. Those rights are carried forward into the extension project as well. Now, in terms of our engagement with 127, we've tabled a number of different options for 127. Our overarching objective is not to, obviously, purchase the property. That's not our desire, although that's not something that we can control, and the landowner
20 on 127 has the ability to put the property to us at his election only. But our stated objective is coexistence, and we'd like to turn this into an opportunity to demonstrate benefits to all. So the first stage of this has been to talk to 127 about noise mitigation measures that we could undertake on the various properties, all three of them on that property, and then we've made other arrangements – offered other arrangements
25 which would facilitate – if, after all those initiatives have taken place, that if the noise impact was – remained unacceptable, then there's an opportunity to support the landowner to move – to purchase a home and move into town. And we continue – so those offers have been made, both noise mitigation offers and also support for relocation if that – if the landowner deemed that appropriate – again, not at our
30 election, at theirs – and we continue those discussions with them.

MR HANN: John Hann. Thanks, Paul. Zada and Chris, do you have any particular comments around or questions in relation to noise?

35 PROF LIPMAN: Yes. I just had a question. I would appreciate some clarification. You mentioned that you are going to have noise mitigation measures in relation to the CHPP and partial cladding, and you do mention some of the measures that would be taken in response to submissions. I wonder if you could just give us an
40 explanation of those and the extent to which they will be effective.

MR FLYNN: Yes, Zada. It's Paul Flynn here. There's a number of different measures that we've deployed at other sites, which we've adopted for inclusion in the Vickery Extension Project. We have found that particular pieces of infrastructure have the potential to create some noise, but we've also found that cladding, as you've
45 mentioned, has been a very effective means by which we could reduce the amount of noise that's generated. So the CHPP is one opportunity to reduce noise, particularly in the direction of the receivers, and – but we've found benefits in other areas of

infrastructure which we would review also. Of course, there's going to be real time monitoring across the site to ensure that we're able to actively manage noise to the extent that it's being generated in excess of any of our licence requirements, as we do at our other operations.

5

PROF LIPMAN: Thank you, Paul. Can I just ask for a little bit more clarification on the measures you mentioned in relation to CHPP. You talk about the HushClad acoustic linings for the bin and the CHPP and covers and claddings of conveyors. If you could just elaborate on those aspects, please.

10

MR FLYNN: Yes, Zada, I can do that. Yes, those are certainly examples that we see as being effective in being able to reduce the noise from fixed infrastructure. So another example has been the train load-out infrastructure has also found at times, in certain weather conditions, to generate more noise than during normal weather conditions, and so cladding also can be used there, as you say, enclosing conveyors such that the noise transmission from conveyor systems, pulleys in particular, are minimised, and those have turned out to be very effective measures for the reduction of noise from that fixed plant.

15

20 PROF LIPMAN: Thanks very much. And you'll be proposing to use them on the Vickery Extension Project?

MR FLYNN: Yes, we are.

25 PROF LIPMAN: Thank you.

MR HANN: Chris, do you have any particular comment around noise?

PROF FELL: No, not for noise, John.

30

MR HANN: Okay. It's John Hann here. Perhaps if we could just move to the coal processing and the proposed new CHPP. What's the full tonnage that you expect to put there? As we understand it, it's the material that would be proposed to be extracted from the Vickery Extension together with material coming from Tarrawonga, rather than it going to the existing Gunnedah prep plant. Is that – that's correct? And how does that relate to, if you like, the existing approvals?

35

MR FLYNN: Thank you. And John, just further to the question on 127, I will add that the noise impacts on 127 do reduce over time, of course. The mining operations do start the closest proximity to the receiver in this instance, and move away to the south-eastern direction over time, such that the impacts after the first few years diminish as the mine progresses away from 127 as a receiver.

40

MR HANN: Okay. Thank you, Paul.

45

MR FLYNN: But in terms of your question on the prep plant, yes, it is the aggregate of the existing approved mine's output combined with the Vickery south

tenement reserves. That would be processed through an onsite facility similar to the one we have at Maules Creek.

5 MR HANN: So – John Hann here. So what’s the total in any one year while Tarrawonga would be supplying into – what’s the total in any one year that the proposed new CHPP would be processing?

10 MR FLYNN: Yes. The total in any one year is 13 million tonnes. So the Vickery Extension Project being 10 million tonnes, which is obviously the peak output. It’s not actually the average of that output over the life of mine. The average is more akin to eight. And then, obviously, the productive – production limit of Tarrawonga currently is 3 million tonnes of ROM per annum. And so the aggregate of those two peak outputs, or the authorised levels, would be 13 million tonnes per annum.

15 MR HANN: Okay. Thanks, Paul. I think that’s pretty clear. John Hann here. Zada and Chris, any questions around those figures?

20 PROF FELL: I’m just interested – Chris Fell – in the – whether – if you are operating at peak capacity of the CHPP, how much does that increase the water demand of that unit?

25 MR FLYNN: Chris, it’s Paul Flynn here. The peak water demand that we’ve outlined during the course of the presentation of the EIS is 2000 – approximately 2000 megalitres per annum. That includes the plant operating at full capacity.

PROF FELL: Okay. Thank you.

30 MR FLYNN: I might just say also, if I can, that the peak productive capacity is obviously – is, as such, the peak. The average of the life of mine will be somewhat lower to that, closer to the 8 million tonnes. The Tarrawonga coal itself has only 10 years remaining from now, and assuming approval of the project, construction times associated with the development of the Vickery Extension Project, then you’re probably remaining with approximately seven years of life when Tarrawonga coal would be moving through the Vickery Extension Project.

35

PROF FELL: Thank you.

40 MR HANN: John Hann here. Paul, the next issue we wanted to raise with you relates to the final landform and, in particular, the void itself and recognising that there would be a single – as proposed, there is a single new final void. There is some discussion, particularly in the department’s assessment report, regarding the optimum final landform and consideration of a no void option, and there are figures included in there for the cost – and I’m setting aside for the moment the environmental aspects of this, but the cost of, ultimately, having no void. I’m wondering if you could
45 elaborate on that.

MR FLYNN: Thank you, John. Paul. Yes, I'll attempted to answer that. We have looked at this, of course, ourselves, and I did make the statement in the presentation that we have looked at it and it is uneconomic to fill the void. It does serve a purpose, as I mentioned, as a sink in the proposed final form. The estimate to
5 backfill that void, based on our experience – and when I say that, the volumes obviously would be easy to verify, but the rate – the cost per BCM, bank cubic metre, that you'd apply to that we can take from our operations, and we've assumed – assuming a rate from our most efficient mine, you would be about \$600 million to fill the void. We have also analysed partial backfilling, which doesn't provide any
10 material environmental benefit, amounted to about \$440 million.

MR HANN: John Hann. Paul, thank you. With your estimate of 600 million – and it's understandable that that might be uneconomic – is that based on the assumption that you work to a mine plan that ultimately creates a significant depression in the
15 southeast to become a sink, and then you're then deciding, all right, to backfill that? Is the cost substantially different if you're working on a mine plan from very early on in the mining program, let's say from years 2 or 3 onwards.

MR FLYNN: Yes. Look, in fact, the plan is exactly, John – it's Paul here – is exactly as you described it in that latter case. So from our perspective, the most efficient and, coincidentally, the best approach to minimising the size of that final void – and they are coincidentally aligned, but logically also. Obviously, the early couple of years, as you've mentioned, would require overburden to be taken out of the pit and placed in an out-of-pit dump, and that's obviously because you're trying
20 to create space in which to work. But as soon as you can, you would want to be – extract the last seam at the bottom of the pit to create an opportunity for in-pit dumping. Now, when I say "coincidentally, but it's logical also", obviously, the least amount of times you need to pick up and rehandle the overburden and the shorter the distance you need to haul that dirt and place it in its final location is the
25 cheapest way and also the best way to minimise the size of the final void. And doing that is in-pit dumping. So we are minded – incentivised, in fact – to achieve in-pit dumping as soon as possible, which minimises the quantum of overburden that remains outside of the void.
30

MR HANN: John Hann. Thank you, Paul. Do you have any questions, Zada and Chris, on this?
35

PROF LIPMAN: None from me.

PROF FELL: Chris Fell here. Mr Middlemiss made certain suggestions about doing somewhat different calculations, and presumably in this five years period before you have to repeat the mine plan, you'll have picked up a lot more information. Is it your intention, if the thing is granted, to actually go ahead and do those calculations using the different bases?
40

MR FLYNN: Sorry, Chris, it's Paul here. Can I ask you to further clarify that question, please?
45

PROF FELL: Okay. In his review for the department, Mr Middlemiss, the expert, talks about the original proposal, the groundwater flows and the void proposition and the fact that if it were to be a filled void, the groundwater flows mightn't be – might be okay, if I can put it that way. He suggests that you use different methods to
5 actually valuate the steady state situation. Have you thought about that?

MR FLYNN: Chris, it's Paul here. Look, the review and optimisation of the final void form obviously would be an ongoing exercise during the course of mining. Having said that, having said that, there is a given quantum of coal that you'd like to
10 extract and a given volume of dirt that needs to be extracted in order to do that. As I mentioned, we'd be heavily incentivised to leave as much dirt inside the void because it's cheaper to move than take it out and locate it outside of the pit. The final, if you like, optimisation of the final void would happen approximately five
15 years before the closure of the mine itself, when, you know, many of those variables that Mr Middlemiss has mentioned are – you'd obviously have greater clarity, and it would be an opportunity for some refinement, but, in all of those cases, essentially taking back, you know, essentially 150 million tonnes of dirt and putting it back into
the pit would be – would cause the project to be uneconomic.

20 PROF FELL: Thank you.

MR HANN: John Hann. Thank you, Paul. If we could move on to the matter of the overburden on the alluvium, and you – this is in the north-west, and you did touch on it earlier in your presentation. We'd just particularly be interested in the impacts of
25 that, and we accept that, and we understand that, that's an area that has been previously disturbed through the earlier mining operations there, but it's really a matter of the design of that overburden in protecting the alluvium beneath it and how you expect the monitoring is going to – will be effective enough to be able to ensure that the underlying alluvium will be protected, given that the Department, DPI
30 Water, did have some reservations on this.

MR FLYNN: Yes. Thank you, John. Paul here. Look, we obviously – we note, of course, that there is significant overburden in placement in this area already, and that a void obviously does exist there as perhaps not very well marked out, but you can
35 see in that slide 22 there's definitely a void there. We plan to fill that, and, from the modelling that we've done and the test work that we've done, the alluvium itself is not obviously particularly high quality in that regard, but you can see the significant impact, and now, if I'm pointing to it, can you see the slide on the page right - - -

40 MR HANN: Yes. Yeah. No problem.

PROF FELL: Yes. Thank you.

MR FLYNN: So, if I'm looking at the orange line that traverses the slide bottom-
45 left to top-right - - -

MR HANN: Yep.

MR FLYNN: - - - the left-hand side, if I can refer to that, are the regionally mapped alluvium boundary.

MR HANN: Yeah.

5

MR FLYNN: Obviously, there is a significant body of overburdened material sitting on that already. The test work that we've done would indicate that there will be the potential for some minimal seepage through that as there currently is, given that there's existing in placement on top of it, but we are able to say that the quality of the water going through that, to the extent that there is seepage and migration through the overburdened in placement will actually contribute water which is potentially better than what's there already.

10

PROF FELL: Okay. That's very helpful. Chris Fell.

15

MR HANN: Zada, do you have any particular comment on that?

PROF LIPMAN: No. Just other than to – you referred to DPIE Water's concerns about that and what your views were on that.

20

MR FLYNN: Well, we did notice that the reviewer did say that there will be no change in the beneficial use category of the alluvium quality as the overarching outcome from Middlemiss, the peer reviewer for DPIE, and the work that we had done was consistent with that as well, Zada.

25

PROF LIPMAN: I'm just referring to DPIE Water expressed the view that they didn't support the emplacement of on the top of the alluvial aquifer. I just wanted your comment on that.

30

MR FLYNN: Yes. We can try and look at this a little bit further in our work, but, of course, it's part of – if we want to avoid having the canyon void remaining in that area, it will be required to be filled, and the only way to do that, of course, is to obviously put overburden over the top of it, and our overarching objective in designing the final landform post-mining has been driven by or motivated by the principle of minimising the number of – if I can call it remnant voids that would reside in that final landform plan.

35

PROF LIPMAN: Right. Thank you.

40

MR HANN: Anything more, Chris, on this matter?

PROF FELL: No. I think I'll leave it there, John.

45

MR HANN: All right. Okay. John Hann. So, moving on from the overburden on the alluvium, in regard to water licences – and we appreciate that was part of your earlier presentation, Paul, and I guess this is notwithstanding that you've confirmed that, in your view, you'll have sufficient licences as required for your overall water

demand, but, in times of, you know, drought, and presumably that might be encountered over the next 25 or 26 years, where there may be insufficient water actually available, notwithstanding that you hold the licences, how will you manage your operations in that regard? And we understand that obviously one of the largest
5 demands for water is in dust management on your haul roads.

MR FLYNN: Thank you, John. It's Paul here. Our recent experience, if I can refer to that, I think is important in attempting to answer your question, John. Of course, Maules Creek, a large-scale mine closing in on its upper production limit, is
10 obviously a big site, and, during these dry periods of all of 2018 to 2019, we were able to manage ourselves until such time that we had groundwater access, which wasn't until December of 2019, in fact, and the way in which we were able to do that was obviously a bunch of management activities, not just water efficiency measures within the prep plant itself, but then also the use of additives to our dust suppression
15 activities to minimise the water content from various agents that we're using to bind the dust obviously to the ground and to prevent lift-off, you know, after being traversed by heavy vehicles.

So that has been very successful, and, as a result, in dust suppression, our water
20 reduction was in the order of 50 per cent as a result of that. Obviously, as I mentioned in December of 2019, we were able to secure groundwater access, which is a far more secure and lower risk alternative when you're solely dependent on the river, as Maules Creek was at that time. Now, the Vickery Extension Project is obviously a product of that experience in a way in that it includes, obviously, a
25 borefield which we believe will be – is quite prospective to be able to complement the other sources of water for the project. So – and, as I mentioned earlier, the modelling that we've done doesn't take into account these more recent and contemporary experiences that we've – and learnings that we've taken from the recent drought to minimise the water requirements on-site.

30 So we feel comfortable that certainly there's a market which has surprised us in the depth of the water trading in zone 4, I'd have to say, so there's more than adequate, we would deem, there for us to procure licences in the event that we need further licences, and, overall, there has not been a reduction in zone 4 licences in the area, so
35 those numbers are contemporary and would appear to be solid in terms of, you know, any potential revision to what a unit of allocation allows you.

MR HANN: John Hann. Thank you, Paul. So, in the conditions, which I think is B39, it refers to adjusting the scale of development. So, from what you've just
40 explained, you don't envisage that to be necessary in the likely event of drought in the future? You nevertheless believe you'll have sufficient water available? Is that a reasonable conclusion, or can you give an example of how you might need to adjust the scale of your development?

45 MR FLYNN: John – Paul – yes, I can do both. It is a reasonable assumption that we're presuming we will be able to navigate our way through difficult drought conditions if we have both combined groundwater access and obviously river access

as well, but, importantly, you know, unforeseen things can change, drought periods could elongate, and other measures would be required. So, in this last dry period, you'll imagine that we had various contingency plans prepared for the modification of operations to be able to continue to operate through prolonged dry periods.

5

Now, part of those could be simplistically to wind back production to a lower level, but – and that's one alternative, but one of the other very viable alternatives for us fortunately is that the inherent coal quality and the low ash content that I've referred to in a number of our slides that we're fortunate in the Gunnedah Basin to have in our deposits means that a significant portion of our coal can actually be bypassed from the CHPP and sold directly from the pit, and so, whilst we didn't need to invoke either of those two measures in terms of winding back performance or changing our product mix during this last dry period, both of them are open to us in order to be able to modify the operations to be able to sustain an elongated dry period.

15

MR HANN: So, by bypassing the CHPP, you're reducing your water demand in your operation; is that - - -

20

MR FLYNN: Very much so. So there are certain seams there – Maules Creek has the same seams – there are certain seams that we know bypass very well, and currently we do bypass a number of them, such that the in-situ ash in those seams may be anywhere between six and 10 per cent, which is very low by seaborne trade standards, and that those products at that level are easily saleable – for a premium, in fact – in their unwashed form.

25

MR HANN: All right. Thank you, Paul, for explaining that. Any comments – sorry. John Hann. Any comments, Zada, Chris, on this matter?

30

PROF FELL: Chris Fell. I'm just interested to know would you ever contemplate using water in the void, maybe cleaning it up and using that?

35

MR FLYNN: Yes. We certainly consider that, Chris. I suppose the question of that is one of timing. Mine water used to meet our requirements – that's certainly part of our strategy for our existing operations and would be a source of water for the Vickery Extension Project. That is for sure. Of course, water in the final void – it is contemplated that that would be a groundwater sink and that water would reside that longer term.

40

PROF FELL: Yes. I appreciate that, but, as a temporary measure, it's possible?

MR FLYNN: Yes. Indeed. Absolutely. Yes. It is indeed. We currently do that.

PROF FELL: Right. Thanks.

45

MR HANN: John Hann. Thank you, Paul. In regard to road transport, can you confirm your timing for when you expect – if your project is approved, and you're

commencing your construction, can you confirm the planned timing of removal of coal transport from public roads – excluding Tarrawonga, which we appreciate is an ongoing transportation from the Tarrawonga mine to the proposed new CHPP plant, so we're really talking about – I think it's the Blue Vale Road and down to the existing Gunnedah plant. So what's your expected timing of that?

MR FLYNN: Thank you, John. It's Paul. Yes. We would, as you mentioned, still have continuing haulage of coal between Tarrawonga and Vickery on the private haul road, and then it's really – your question is focused on Blue Vale Road being the commercial or the public road?

MR HANN: That's right.

MR FLYNN: Yes. Thank you. Look, from – and I'll try and characterise this – from the commencement of construction is probably the best way to describe it, because the approval – the timing of the approval and the various approvals that follow that, management plan, CHPP, relatedly, may be unpredictable.

MR HANN: I appreciate that. John Hann. I appreciate that aspect of it. Thank you.

MR FLYNN: But I would say, from – the real question is how long does it take you to build the CHPP on-site from the time that you're first able to do so, and certainly we did it very quickly at Maules Creek, but we were fortunate some of the aspects of the construction were preassembled prior to the approval being received. That's not the case in this instance, so it certainly would take a full two years, if not slightly more, from the commencement of construction to have a commissioned plant capable of washing coal for not just Vickery but also Tarrawonga as well.

Obviously, Vickery in the early years would be subject to a ramp-up, and so there would be smaller quantities obviously than the approved production limit of 10 million tonnes per annum being processed at that time, meaning that there will be plenty of capacity for Tarrawonga coal to be processed there, but I'd say that it could not happen before two years from the time construction – we're obviously incentivised to make that happen as quickly as possible because of the differential in the washing costs associated with the Gunnedah prep plant versus a modern plant such as the one we have envisaged for Vickery, which is a replica of Maules Creek. Our costs diminished significantly by moving to that format, and, of course, you'll imagine rail haulage is vastly more comparative in terms of moving the product coal than, of course, road haulage in B-doubles, so we're incentivised on both accounts to get that infrastructure up as soon as we can.

MR HANN: John Hann. Thank you, Paul. On a related matter, given the truck movements that are involved and the employment associated with those, while they may well be contractors, not necessarily employees, but are those figures, employment figures taken into account – in other words, when that road transport ceases, and it's transferred effectively to the CHPP, are they taken into account, or is

it because this is – you know, the approved mine is not in operation, and, therefore, this effectively is a new mine, the proposed mine. I just wondered how that might be taken into account.

5 MR FLYNN: John – Paul here – thank you. Yes. Look, partly, it’s actually already dealt with with the need for enduring haulage on that private road that I mentioned. So you will have a trucking contract which exists post the long haul, if I can call it that, from Tarrawonga all the way down to Gunnedah, and then, of course, we do have – whilst there may be less trucks doing that – and that is the plan – available
10 people who have – who are currently these are all external to Whitehaven – they are contracted to another company that does – fulfils that contract, but there would be people available to us then who would be able to fulfil jobs in the Vickery Project itself, so there’s an opportunity there to absorb those, and the total pool of people available in the area to do that has been part of the study that underpinned the 450
15 jobs that we’ve quoted in the EIS.

MR HANN: John Hann. Okay. Thank you, Paul. Are there any other questions around road transport, Zada and Chris?

20 PROF LIPMAN: I’ve just got a question, just a clarification issue for my own purposes. Is it envisaged that the construction of the CHPP will coincide with the rail spur?

MR FLYNN: Yes. Zada, it is envisaged – it’s Paul here – yes. It is envisaged that
25 they would be done concurrently.

PROF LIPMAN: Right. Thank you.

MR FLYNN: We’d definitely like to minimise the construction period, and,
30 because they are largely in separate areas, there should be no reason but for the normal restrictions of safety, traffic management and the like why we wouldn’t be doing that at the same time, and, of course, minimising the community and environmental aspects of construction activities to the minimum possible period that we can possibly manage.

35 PROF LIPMAN: Thanks very much.

MR HANN: John Hann. Thanks, Paul. Look, in regard to the project amendment – and this relates to mining lease 1718 – we’re just interested to understand, given that
40 that is no longer proposed for extraction because of the terms of this particular mining lease, what are the proposed operational activities that are likely to occur on that land since you’re not extracting it?

MR FLYNN: So, John – Paul here – can I ask just for a further clarification, if you
45 wouldn’t mind, because 1718 obviously has a number of pieces to it: are you referring to the south-eastern corner?

MR HANN: No. I'm referring to, I think – and you might need to clarify this for me, Paul – I'm referring, I think, to the northern area of ML 1718, which was the subject originally of the proposed extraction boundary but is now excluded from that in your amendment application because extraction is not permitted under the terms of the mining lease 1718, and so what we're asking is what, therefore, will happen on that land.

MR FLYNN: That will largely be waste in placement in that area, John. Paul speaking.

MR HANN: Okay. All right. So that will just form part of your overburden in placement or waste in placement. All right.

MR FLYNN: Yes. It will over time. Yes. In the northern area in particular that you've asked the question on.

MR HANN: Because I don't think it changes anything to the south-east in that that wasn't subject to the extraction plan in the unamended application. Correct me if I'm wrong, Paul.

MR FLYNN: You are absolutely correct.

MR HANN: Okay. Thank you. So John Hann. We've got just a couple of other questions for Paul, you and your team.

PROF FELL: John - - -

MR HANN: Yes.

PROF FELL: John, could I - - -

MR HANN: Sorry, Chris. I overlooked you.

PROF FELL: No. No problem. Before you move on to those questions, I just had one final processing question, and that has to do with air quality. I mean, you're going to an environment where you've got to operate against tighter requirements on PM2.5. I just wonder how you feel you'll accommodate that or otherwise. Now, would - - -

MR FLYNN: So, Chris, obviously, the changes there have been subject to the modelling exercise that has been conducted and been reviewed. Fortunately, you know, we're in an environment where our dust is not particularly fine in the first instance, so that just aids us in terms of its management, but it has been included in the modelling, and we're satisfied that we can meet our requirements given those changes.

PROF FELL: Okay. Thank you.

MR HANN: John Hann. Paul, just some clarification around accommodation of your proposed workforce. We're interested if you're able to elaborate on what the expected locations of that demand for accommodation are most likely to be, and this is – there's construction, we understand it, which is short-term and limited, and then there's clearly the ongoing operational workforce.

MR FLYNN: Thank you, John. Paul here. I'll try and answer that in two parts as you've mentioned, construction first and then operational workforce. From a construction perspective first and foremost, we have – we acknowledge that there's significant capacity still remaining to be used in the Boggabri Civeo camp, and it's acknowledged there also that there's the opportunity for that to be increased in size also during a period that may indicate a greater peak demand than is currently being experienced, so that's certainly a viable and ready alternative for us. We also have historically used support for construction personnel in the local communities. Now, Boggabri and Gunnedah and Narrabri all form part of that alternative in terms of where other people would be housed during that construction period.

Now, the answer is relatively similar during the operational phase, although the mix of those locations is quite different. As I mentioned before, I think the Commissioner is aware that we're not in a position where we need to foster fly-in, fly-out type arrangements with our business. We have viable towns that we feel it is better suited to invest in them, and that has certainly worked well for us. That's not to say the camps don't have an important role to play – they absolutely do – but our longer term objective is to have people resident in the communities around our operations, so we do speak to the councils quite regularly about the quantum of housing stock in the area, because that is important to us.

We are incentivising, you know, young people in particular to come and take up residence within the communities, and the quality of housing stock is important to them, and so we're very supportive of people taking that route rather than looking for temporary accommodation in the camp, or in the camp facilities, being two of them in Boggabri and Narrabri. We do provide some early assistance for transition for them to do that where they require some time to find a home within the existing communities, but that tails off over time, incentivising them to move into more permanent residential accommodation, one of the town centres.

MR HANN: John Hann. Thank you, Paul. Zada and Chris, any queries there?

PROF LIPMAN: None from me.

PROF FELL: No. I'm okay. Thanks.

MR HANN: No. Thank you, Paul. While speaking, I guess, of local councils, we are interested in the voluntary planning agreements, and you did touch on it – thank you – in regard to your presentation earlier. We're just interested in your comments on the current status of EPAs with both Gunnedah Shire and Narrabri.

MR FLYNN: Yeah. Thank you, John. Paul. Certainly, with the Gunnedah Shire Council, we have agreed terms, and, in fact, documentation has been agreed already, so we're in a good position there with really just the closing steps of that agreement to be put in place. Nothing further than that. They're just mechanical steps now
5 which need to be done, so I would expect that within days. With Narrabri Shire Council, the agreement is very similar to the one – well, it is the same as we've offered to the Gunnedah Shire Council. Obviously, we've adopted the 70/30 split that was part of the previously agreed agreement for the existing approved project. So we're open – we remain open to any further discussions with Narrabri Shire
10 Council on that, but that's where it resides currently.

Obviously, Gunnedah obviously bears the lion's proportion of the footprint of the mine, and so the 70 per cent would appear to be appropriate for them, and they've obviously seen the terms associated with that 70 per cent as acceptable. As to why
15 we haven't been able to find the same meeting of minds with Narrabri on the same terms, but obviously with a 30 per cent share of that total 10.7 number that's quoted in the slides, I'm unable to provide any further detail on that. What we have done, I have to say – I know that the council – Narrabri Shire Council, that is – did solicit public expressions of interest from Boggabri, the Boggabri community obviously
20 within their LGA, as to, if there was to be a Vickery Extension Project, and there was to be some contribution from a voluntary planning agreement, how would they like to deploy those funds?

A list of projects actually came back from the community, which was interesting –
25 and helpful, in fact – and so we've written back to Narrabri Shire Council saying that we'd be happy to support – make a contribution to each of those projects listed by the community, allocate a pro rata across those projects, the 30 per cent share that our offer entails, and that was the latest development that we've undertaken, and, since that time, we haven't heard anything further on this.

30 MR HANN: What was the timing of that latest development as you just referred to? John Hann. Yeah.

MR FLYNN: John – Paul – I couldn't be entirely sure, but I would say it's two to
35 three months ago.

MR HANN: Okay. Thank you. This current year? Yeah.

MR FLYNN: Yes. Yeah. Look, the whole process has taken, you know, several
40 years, as I'm sure the Commissioner is aware that many of these things do, but I would have said it will be a matter of public record as to the expressions of interest sought by Narrabri Shire Council, and then I don't have the date to hand, but I can provide that to you just by way of subsequent confirmation exactly when we formalised our communication back to the council that we would be willing to
45 support each of those projects in pro rata across the offer we'd made, so I can certainly confirm that for you, when we communicated that in writing to the council.

MR HANN: Okay. No. Thank you, Paul. Zada and Chris, any comment you have in regard to the VPAs?

PROF LIPMAN: Not for me.

5

PROF FELL: Not for me.

MR HANN: John Hann. So, Paul, the conditions that obviously you're familiar with as proposed by the department – have you got any comment in regard to those conditions in terms of operational aspects or any other matter that you'd like to draw to our attention?

MR FLYNN: Paul here, John. No. Look, we've had time now to digest the conditions and review them from a workability perspective, and we're accepting all of the suite of conditions as they're recommended.

MR HANN: John Hann here. Okay. Thank you, Paul. Zada and Chris, do you have any other questions for Paul and the team, because that runs through our – sort of, the ones that we had discussed. Are there any other questions you have?

20

PROF LIPMAN: Yes. Zada Lipman. I just have two very minor queries in relation to rehabilitation. I noticed that, when we looked at the slide where you showed us the offsets and the two sets of colours, the offset numbered 5 was in orange, which was a different colour, and that's the one that I understand – this is the area I'm referring to here, the one – the inundated area that was intersected by the rail spur and which has been extended by the current project. The other offset areas appear to be sort of purple and different colours, and I was wondering – and green – I wondered if that area was orange for a reason. Is it under consideration, or is there

30

MR FLYNN: Thank you, Zada. It's Paul here. You're referring to the elongation of the area below the rail crossing?

PROF LIPMAN: Area 5. Yes.

35

MR FLYNN: Yes. Yes. Offset area 5.

PROF LIPMAN: The other – the approved one is clearly a different colour - - -

40

MR FLYNN: Yes.

PROF LIPMAN: - - - green, and the proposed is generally pink, but that one is orange, and I was just curious as to whether that was still orange.

45

MR FLYNN: My apologies for the confusion associated with the colouring of that, because there are approved offsets just south there, and my understanding is there's a net increase in the offset because of the rail.

PROF LIPMAN: Yes. I'm aware of that. I'm just wondering why it's in a different colour from the other offsets.

5 MR FLYNN: I think that's – I'll have to take that away, Zada, and confirm to you why that's the case. I believe it might be an oversight on our part, but I'll confirm that specifically for you.

10 PROF LIPMAN: Right. Thanks. That's just very minor. And the other aspect was in relation to the koala management plan. I noticed that you mentioned when you talk about management measures that you envisage – and it suggested to me that this was something that was going to happen in the very near future – that, to compensate for a clearing of koala habitat, there would be plantings in the near future of potential fig trees. Now, is this the case, or is that further down the line when the rehabilitation commences, in the area where it crosses the – the rail spur crosses the
15 river?

MR FLYNN: James, do you have a comment to make on this one?

20 MR STEELE: There's a few components to that, professor. The compensation for the koala habitat is covered by the biodiversity offset credit requirements. That's the formal compensation mechanism under the Biodiversity Conservation Act, and then additional to that is the koala plan of management and the associated tree plantings as described in that koala plan of management, and the timing for that is as soon as practicable after the project is approved and the project commences.

25 PROF LIPMAN: So am I correct, then, in my understanding that that's going to commence very early in the process?

30 MR FLYNN: Yes. It will.

PROF LIPMAN: Right.

MR FLYNN: Zada, it's Paul. Sorry.

35 PROF LIPMAN: Right. Thanks, Paul and James. I just wanted to clarify that.

MR HANN: John Hann here. Chris, have you got any particular - - -

40 PROF FELL: Yes, John.

MR HANN: - - - questions at this point?

45 PROF FELL: Chris here. A very general question, and thank you for the detailed economic analysis and greenhouse gas analysis. I just wonder, in this post-COVID world that we're entering, do you think some of these analyses will be much changed?

MR FLYNN: Chris, that's a very good question – it's Paul here – and a difficult one. I wish I had some fortune-telling capacity to be able to assist in the answering of this question. I note the markets in which we sell our coal are, you know, almost exclusively – as you know, we are an exporter, and almost exclusively to what we
5 term as the premium Asian markets, and by that I mean the ones that are paying – you know, quite developed markets who are paying premiums for our quality. As a group, they all seem to be managing themselves relatively well from a COVID experience perspective, and so Japan, Korea, Taiwan being the principle large markets for us, and Vique Extension coal will certainly be welcomed in those
10 markets, so I suspect, economically, they will emerge from the post-COVID slowdown perhaps in relatively, you know, good measure as a group, if I can say that, given that they're all in good shape today compared to other countries.

So we're watching that very closely, because there's no doubt that markets are a little
15 softer as economies slow, but, given their state of management of COVID, I expect them to come out in unison, more or less, which would be positive for the market more generally. As with all these things, everybody learns something out of it, and I think the security of our supply chains is certainly something that's front of mind for all countries as a result of this experience, and long-term certainty of these supply
20 chains I think is something I think which will be more front of mind particularly for those types of countries where they don't have indigenous resources of their own, and so I suspect the pattern of more spot-based supply chain management may actually be diminished somewhat or replaced to some degree by a greater degree of longer term contracting to secure essential resources.

25 PROF FELL: Thank you for that answer. That's helpful.

MR HANN: John Hann here. So, Zada and Chris, do you have any further
30 questions of Paul - - -

PROF LIPMAN: No.

MR HANN: - - - and his team?

35 PROF LIPMAN: Not for me.

PROF FELL: No. Just to thank Whitehaven for the positive way they've responded to our questions and the visit yesterday.

40 PROF LIPMAN: Indeed. Yes. I endorse that. I thought the inspection yesterday went very well, was very useful, as was the presentation and questions today.

MR HANN: John Hann here. So, Paul, thank you all for the time this afternoon and
45 your detailed briefing. It's much appreciated, and particularly the comprehensive response to each of our questions, and, on that note, then, unless you've got any particular question of us, then we'll close the meeting. And thank you once again.

MR FLYNN: John, before we go – and there is one further clarification we might like to make just on Zada’s previous question - - -

MR STEELE: On the orange boundary - - -

5

MR FLYNN: On the orange boundary.

MR STEELE: - - - around the offset.

10 MR HANN: Yes. Of course. Thank you.

MR STEELE: Professor, that’s one of the offsets that forms part of the approved mine, and so the rail spur intersects just the very northern section of that existing approved offset area, and, to compensate from that, it has been shifted just slightly to the south and extended, so it’s not a one-for-one shifting to the south; it’s shifting and extension, so it ends up as a greater area for that particular offset property. The green hatching reflects what is the current approved offset location, and then the orange boundary reflects what would be the revised and extended boundary for the project.

20

PROF LIPMAN: So, in other words, sorry, this boundary has yet to be approved by BCD, and the other one is simply inspected; is that correct?

MR STEELE: That’s right, although it is reflected in the recommended conditions for this project. There’s a table that outlines the offsets for the approved mine, and it reflects what’s called the modified area 5 offset.

25

PROF LIPMAN: Yes. I noted that, but the only reason why it’s orange is because it’s under consideration for extension because of the rail project?

30

MR STEELE: Yes. Because it has been modified. Yes.

PROF LIPMAN: Right. Thank you very much for clarifying that.

MR HANN: John Hann here. Okay. Paul, Mark and James, thank you very much. We will now close the meeting.

35

MR FLYNN: All right. John and commissioners, thank you very much for the time. We’ve appreciated your effort in allocating time yesterday for the site visit and also the time you dedicated to our presentation today and the questions that you’ve asked. We’ve tabled a couple of items that we will follow up and respond to in due course, but thank you again for the time, and we look forward to any further questions or queries that the Commission may have of us.

40

MR HANN: Thank you, Paul.

45

PROF LIPMAN: Thank you.

PROF FELL: Thank you.

MR FLYNN: Good afternoon.

5 MR HANN: And to you. Thank you.

RECORDING CONCLUDED

[4.21 pm]