



MR T. PEARSON: Good morning and welcome. Before we begin, I would like to acknowledge the traditional owners of the land on which we meet, the Gadigal people. I would also 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  
5 today. United Collieries Proprietary Limited, the applicant, is seeking to expend open cut mining operations that exist in Wambo Coal Mine and United Colliery to allow for the extraction of an additional 150 million tonnes of run of mine coal over a period of 23 years. My name is Tony Pearson. I am the chair of this ICP panel. Joining me are my fellow commissioners Robyn Kruk and Dr Peter Williams. The  
10 other attendees at the meeting are Alana Jelfs from the IPC Secretariat, and representing the applicant, we have Mr Gary Wills, Aislinn Farnon, Sean Pigott, John Merrell, Tim Walls and Micheal Alexander. Have I missed anyone?

MR P. JAEGER: Peter Jaeger.  
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MR PEARSON: And Peter Jaeger. 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 and made available on the Commission's website. This meeting is one part of the Commission's decision-making process and will form  
20 one of several sources of information upon which the Commission will base its decision. Those present would be aware that on 12 December 2018, the Commission postponed the public meeting as a result of a commissioner identifying a perceived conflict of interest and withdrawing from the panel.

On 18 December 2018, Robyn Kruk was appointed to the panel, and on that basis, the panel has decided to hold this meeting again. The commission acknowledges the inconvenience that the postponement of the public meeting caused. It is important for the commissioners to ask questions of attendees and to clarify issues whenever we consider it appropriate. If you are asked a question and are not in a position to  
30 answer, please feel free to take the question on notice and provide any additional information in writing which we will then put up on our website.

I request that all members here today introduce themselves before speaking for the first time and for all members to ensure that they do not speak over the top of each other to ensure accuracy of the transcript. I might also suggest that we turn our  
35 mobile phones onto silent. We had a rogue phone this morning. So I'm not sure how that will appear on the transcript, but, anyway, we will now begin. Gary, thank you and to the team for coming in again today.

MR G. WILLS: Thank you, Tony.  
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MR PEARSON: I think we might like – we might follow the same sort of format we did for the first meeting which is perhaps if you roll through a presentation – an overview of the project and, I guess, the key issues as you're seeing it that you would  
45 like to bring to our attention.

MR WILLS: Yes.

MR PEARSON: And there are some follow-up questions that we had from the last meeting that, you know, it sounds like you might have prepared some answers to that  
5 will be included in the presentation. If we're finding that matters aren't covered, then perhaps we can circle back to those at the end of the meeting. One thing I would again emphasise is that you should assume that we've all read all the matters and the new materials that have arisen since the last meeting, particularly the transcript that has been uploaded to our website.

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MR WILLS: Yes.

MR PEARSON: With that, I might throw it over to you, Gary, to take us through your materials.

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MR WILLS: Thank you, Tony. So we will jump straight into the project. We've got some very brief overview slides to cover off a bit of background around the formation of the joint venture and where we are today in terms of the project application. So if we get to a point where you think it's – the information has been  
20 covered or we're across it, feel free to just prompt to move on.

MR PEARSON: Okay.

MR WILLS: So it's a fifty-fifty production joint venture, and when I say  
25 "production joint venture", I – we mean in the sense that the open cut will be managed by Glencore for the joint venture and we will deliver coal to the CHPP, the coal processing plant, which we will manage separately by Wambo, one of our joint venture participants. And they will wash the coal, handle it on the stockpile, and then we will market our coal separately through our marketing processes and deliver  
30 it from our train loading – from the Wambo train loading bin. So the prep plant and train load out will be managed by Wambo, and it's a joint venture just for the open cut. So the existing Wambo underground and future underground options that Wambo has approval for do not form part of this joint venture. It is just purely the leases that are subject to the JV, and there's a slide coming up where I can show you  
35 where those leases are.

So the bringing together of these leases really unlocks the value in the region for – between United and Wambo that has been historically stifled by constraints in the way that our surface boundaries interrelate but more importantly how our  
40 stratigraphic resource is allocated between other. And if I jump to the next slide, you will be able to see that there is a number of leases that are part of the joint venture. So the lease is above the point where I'm now indicating with the pointer. All of those leases above are the subject of a joint venture. So, historically, this is United CCL775. United own from the surface all the way down to just below – just above  
45 the Bayswater seam. Next door to it is CL374 which Wambo own from the surface just down to the Whynot, and then United own underneath that, representing from

the unnamed A down to the target seam for this particular project which is the Vaux seam.

5 Next door to that again, we have ML1572 which is currently owned and operated by Wambo, and that's the existing approved open cut operations for Wambo. That lease has a limitation from the surface down to the Whynot seam, and then underneath that – directly underneath is a lease called A444 which also extends to the outside edge of the ML1572. So A444 is this large area there. 1572 has been already approved and excised from that exploration lease. So underneath it, Wambo – United own through  
10 a contractual allocation the leases in the same context as we own next door, and then there is a joint ownership of the remaining area out here between United and Wambo. But, again, it's allocated on this strata.

15 And then next door to that, we have EL7211 which is owned wholly by Wambo, and they own all of the coal seams from the surface down to depth. So, as you can see, we have physical boundaries on the surface, but, more importantly, we have interrelationships between the allocation of coal seams. United being an old underground operation and with having opportunities to do underground operations out here, we were looking at – when we closed the United Underground in 2010, we  
20 were looking at options to develop future underground resources out here underneath Wambo's existing open cut, however, interactions with Wambo from a surface point of view – so we need to build underground drainage surfaces, etcetera – meant that that precluded our operation underneath the open cut, not to mention there was also geological and geotechnical issues on top of that but also getting access to surface  
25 facilities precluded the development of that opportunity.

So by bringing together the two entities and bringing together these lease and essentially unlocking them as one means that we maximise our resource recovery more importantly for the State and for the shareholders, but we also are able to utilise  
30 a whole host of other benefits in relation to utilising existing facilities that Wambo have in terms of their capacity and their prep plant, in their rail loop, in their existing facilities, in their mining industrial area and also we look to produce some other benefits for the formation of the joint venture which relate to our final landform across this general region as opposed to having two separate operations with their  
35 own landforms being managed at a much smaller level but replicating the same ex-pit dump and final void - - -

MR PEARSON: Yes.

40 MR WILLS: - - - scenario. So there is an improved position from a final landform in our mining legacy - - -

MR PEARSON: Okay.

45 MR WILLS: - - - closure.

MR PEARSON: And just help me understand, so although the ownership is delineated as you've described on that slide 3, when you talk about a fifty-fifty production and joint venture, does that mean that production from each of those seams, although discretely owned, will be shared fifty-fifty, irrespective of they don't actually - - -

MR WILLS: Correct. So we're basically – we have – we will exchange upon formation the beneficial interest in these leases.

MR PEARSON: Yes. Okay.

MR WILLS: And, therefore, we will be fifty-fifty owners of all these coal seams going forward.

MR PEARSON: Okay. And then A444 will be contributed into the joint venture, but is not currently proposed to be mined.

MR WILLS: It's not part of the mining area for this project application.

MR PEARSON: Okay. So - - -

MR WILLS: So these are all the leases that the joint venture is a party to.

MR PEARSON: Okay.

MR WILLS: Our main target area is in seal CL775, which is also sitting underneath CL374, which is already mined out by Wambo. And Wambo are currently mining in ML1572 down to the Whynot seam. And this application is to take that mining depth deeper within the A444 confines.

MR PEARSON: Okay. Okay. And just hypothesising into the future, if the joint venture was to mine seams in A444, would it be by way of a new open pit, extending the Wambo open pit or underground?

MR WILLS: At the moment, Tony, we haven't assessed that. And we have had some conceptual mine plans for that, but it will be a combination of either small open cut pit but also targeting possibly underground seams in that region.

MR PEARSON: Okay. And the likely access point then would be the Wambo open cut, or would it be another decline?

MR WILLS: It would come a contiguous – it would come from here and we would – obviously the effort involved in mining, but the opportunity for the – for access from here, because of the mine plan design, we're doing it in a horseshoe fashion. We turn the corner – or Wambo are currently turning the corner at the moment.

MR PEARSON: Yes.

MR WILLS: So the options to continue that open cut in that direction are somewhat precluded, as time marches on.

MR PEARSON: Okay.

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MR WILLS: So if I jump back to the previous slide, so we're maximising the resource recovery. We're utilising the existing facilities that Wambo have, so it's a good project and, more importantly, it's a Brownfields expansion, taking into account that a large portion of the project area that the application relates to has already been disturbed or has approval to be disturbed. So in terms of the justification slide for the project, as I said, it's a Brownfields expansion with really very minimal additional disturbance associated with the extraction of up to 150 million additional tonnes. It generates over \$370 million in state government royalties and contributes a significant amount of economic activity to both the gross regional area and the gross state area, from the point of view of \$2.1 billion in the gross regional product and over \$3 billion in the gross state product.

So it's a significant contributor to the economy. Importantly for the existing Wambo open-cut workforce, it continues our employment for the existing 250 employees. And then on top of that, we're creating another 250 jobs during the peak mining period. And on top of that, we have another 120 jobs during the construction phase, which lasts for around about three years during the project commencement. So that's a significant benefit for the existing workforce, but also creation of further employment within the region. As I said before, we utilise the existing facilities at Wambo. So that minimises our additional disturbance. We had a previous case for United operating on its own right, which meant that we had to build our own prep plant, build our own rail loops, so it reduces that environmental impact. And by utilising these facilities, we aren't actually increasing the approved annual throughput through Wambo's facility.

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So there's no change to the prep plant feed rate and there's no change to the overall railings coming out of the rail loop for Wambo. So we're utilising spare capacity that's existing in those facilities. As I said before, there is – a benefit of this project post-mining is the contiguous, undulating final landform, which is more in keeping with the natural topography. And we maintain this same number of voids as is already approved for Wambo. So Wambo has two final voids approved. We're able to extract an additional 150 million tonnes, add the royalties, the economic benefit and maintain those two final voids to the same number. We've done numerous mine designs from the inception of the project. We've listened to our stakeholders along the way.

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We've consulted extensively with the community and other stakeholders. That has been undertaken over a period of four years, as over 700 individual stakeholders that we've engaged with during this cycle. So during that process we have received feedback and, where we can, we've made changes along the way. Our predicted impacts for the project, which there are some, we will manage those through mitigation, through licensing, leading best practice management and also a

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biodiversity offset package for our disturbance. And, importantly, the Department of Planning recommends the approval of this project, subject to strict conditions of consent.

5 So the project overview, we have the united open cut, which is the proposed development in this area, on the western side – eastern side of the project area. And that's where the majority of our additional disturbance will come from. We also have the existing Wambo open cut, which we look to take down to a depth – increasing the depth in some areas by up to 120 metres, going down to the  
10 Warkworth seam. We utilise the existing disturbed area, which we will place the overburden from the box cut development for United through this area here. And as I said before, we utilised the existing rail loop prep plan and we do a small expansion by increasing workshop space and administration buildings down in the Wambo MIA or mining infrastructure area.

15 MS KRUK: Can you on that map just show me where the voids would be eventually? It's just useful in - - -

MR WILLS: So the voids in the plan would be there, Robyn, and also there.

20 MR PEARSON: Gary, this might be too detailed. We did have a question for the department on some land that has been acquired from the crown, but we couldn't work out what that land related to. Does that - - -

25 MR WILLS: It was closure of some paper roads.

MR PEARSON: Okay.

MS KRUK: So a stock route paper road?

30 MR WILLS: Just paper roads.

MS KRUK: Paper roads.

35 MR WILLS: Not stock routes, so just paper roads.

MS KRUK: Okay.

MS FARNON: Just paper roads.

40 MR PEARSON: Okay. Where are they?

MS FARNON: The most recent one was right in the middle of the – the most recent one was, sort of, approximately – there was quite a few that were applied for that are just right through the Wambo – so it's through the open cut already. So they were  
45 never used as roads.

MR PEARSON: Okay. Yes. Yes. Okay.

MS FARNON: Yes, so - - -

5 MR WILLS: Other notable features of the project is we have 330 kV power lines  
that we need to relocate. They go straight through the middle of the United open cut,  
which we will relocate into this blue line here. And also there's a section – two  
kilometre section of the golden highway, which we will look to relocate to the  
10 northeast area here, which is that blue line, is the proposed alignment for that. It  
maintains the existing speed. We've estimated at worst it will add about 30 seconds  
travel between Jerrys Plains and Warkworth.

MS KRUK: Show me on this map again – because it's quite handy – I've seen it – I  
15 know a lot of maps have it all in various places – where is the most significant  
section of vegetation that's going to be removed?

MR WILLS: So there's five – so within this area here we're talking in the order of  
around 650 hectares of additional disturbance associated with the project. So there's  
20 3000 hectares within the project area, inside the red outline.

MS KRUK: Yes.

MR WILLS: We're taking 600-odd here. We've already got 150 hectares already  
25 disturbed in the United lease from underground mining. So within that we're talking  
remnant areas in this section here. We've got sections in here, which includes the  
Buloke community, which has been included post our initial application as being  
recognised as an indicator species for the critically endangered ecological  
community of the Central Hunter Valley eucalypt forest and woodland. And then we  
30 have other remnants through this area here, Robyn, and also up in here. Now, we're  
- - -

MS KRUK: If you can on this map – and I seek my fellow commissioners' patience  
35 here – where you've bought land for offset purposes, is that actually visible on this or  
is this out of the footprint?

MR WILLS: It's not that clear, but I do have a slide coming up that I can - - -

MS KRUK: You've got that coming on.

40 MR WILLS: - - - show you exactly those locations. Yes.

MS KRUK: It's just nice to see it all on one, yes.

MR WILLS: Yes. So - - -  
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MR PEARSON: It might be worth also pointing out the location of the EPBC  
communities that are - - -

MR WILLS: So some of those are sitting in this region here. They're also – part of that is the Buloke community.

MR PEARSON: Yes.

5 MS KRUK: Yes.

MR WILLS: So there's 250 hectares – or 247 hectares of CEC sitting within this particular area. There is some up in this region here and a small slither up in that region there, but principally it's all through this central section there. But I will come to those locations of the offset properties later in the presentation.

10 MS KRUK: Okay. No. Thank you for that.

MR WILLS: Some of the project refinements – and the last time I presented to you a greater list, but I've really taken – I've brought that back down to cover what was essentially refinement since the public hearing back in February 2018.

15 MR PEARSON: Yes. Okay.

20 MR WILLS: So overall, though, since the EIS we have made some reductions to our disturbance. So we've reduced it by 40 hectares, which includes nearly 23 hectares of CEC, which is nearly 10 per cent of our original CEC disturbance that we had in our EIS. So we've pulled that back by a material component, from the point of view of disturbing the CEC.

25 DR P. WILLIAMS: Sorry. Can you just go through that again, Gary. I didn't - - -

MR WILLS: Yes. So since the EIS - - -

30 DR WILLIAMS: Yes.

MR WILLS: - - - we have reduced our overall footprint by 40 hectares, which includes over half of that being CEC. When we originally put our application in, we were up around 270 hectares of CEC. We're now back at 247, so that is a material reduction in the disturbance of that community.

35 DR WILLIAMS: Thank you.

MR PEARSON: On slide 5, where are those two land – where are they located?

MR WILLS: So we've made changes in this area here.

MR PEARSON: Okay.

45 MR WILLS: We've made changes up in here.

MR PEARSON: Yes.

MR WILLS: Some along there. They're the material areas, Tony.

5 MR PEARSON: Okay.

MR WILLS: Our biodiversity package – back at the last meeting in February 2018, we noted that we added essentially three changes to our biodiversity package, we added two properties and we expanded one existing site and added a significant  
10 amount of CEC, which basically gave us all of the CEC that we needed for stage 1 of our disturbance proposal. Since then, back at our last meeting, we alerted to the Commission that we have identified another property, which is the South Wambo offset property. It's – and I will come to that - - -

15 MR PEARSON: Okay.

MR WILLS: - - - and I will show you where that location is in the coming slides. It adds 264 hectares of – in total area but adds another nearly 200 hectares of CEC. So that property alone goes a long way to satisfying over half of our requirements for  
20 CEC disturbance in stage 2.

MR PEARSON: Okay.

DR WILLIAMS: And that satisfies the EPBC requirements as well?  
25

MR WILLS: That is – the CEC is the EPBC - - -

MR PEARSON: Yes. That is the - - -

30 DR WILLIAMS: Yes.

MR WILLS: Yes. So the controlled action referred to – from a biodiversity perspective of the Central Hunter Valley Eucalypt Forest and Woodland Critically Endangered Ecological Community, the Swift Parrot, the Regent Honeyeater and the  
35 Spotted Quoll – so in offsetting the CEC, we also offset those other fauna species at the same time.

DR WILLIAMS: No problems. Yes.

40 MR PEARSON: That has not been assessed though, has it? The South Wambo offset package?

MR WILLS: We have done a ground-truthing exercise.

45 MR PEARSON: Okay.

MR WILLS: We've the team from ..... out there in recent weeks.

MR PEARSON: Right.

MR WILLS: So we still have to go through the process of formally going through the review with OEH and Department of Planning - - -

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MR PEARSON: Yes.

MR WILLS: - - - but these are indicative numbers.

10 MR PEARSON: Okay.

MR WILLS: As I said before, we are delivering a much-improved final landform, and since the meeting in February last year, we've gone through some more refinements with the Department of Planning, incorporating more detail around our micro-relief design and also incorporating improvements in our drainage line, which lend themselves to being more in keeping with natural drainage lines as opposed to, say, drop structures and other things that are typically constructed by mining operations. We did a lot of work in response to the IPC review on filling in final voids, both from an economic cost and an environmental cost, and we will have some updates on that, which is one of the – some of the questions from our last meeting.

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MR PEARSON: Yes. That would be terrific. Yes.

25 MR WILLS: But that included a lot more detailed work around the material movement, the physical mine planning, and we scheduled out the work associated with winning material from the dump and placing it back in the pit - - -

MR PEARSON: Yes.

30

MR WILLS: - - - for the extension of the mine life for up to six years, etcetera.

MR PEARSON: Yes. Yes.

35 MR WILLS: So that's where the \$770 million came from.

MR PEARSON: And I think that the reason for that is to try and – so when we undertake our assessment, there's a whole range of, kind of, buckets we need to look at and, for us, it was an attempt to try and separate the issue into components, so the economic costs, the preferred environmental outcome and so on.

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MR WILLS: Yes. Yes.

45 MR PEARSON: So we can assess each kind of issue discretely and then package it all up - - -

MR WILLS: Yes.

MR PEARSON: - - - into an overall assessment.

MR WILLS: And we will come to some slides detailing - - -

5 MR PEARSON: Yes.

MR WILLS: - - - that further work we've done - - -

10 MR PEARSON: Yes. Okay.

MR WILLS: - - - since our meeting in December.

MR PEARSON: Yes.

15 MR WILLS: And then, further to that, along the way in response to the IPC report and in conjunction with the Department of Planning, we have made additional commitments to numerous initiatives which had been incorporated into the draft consent conditions – and I won't go through these in detail but, you know, noise – some noise stuff, some fume programs, etcetera.

20

MR PEARSON: Yes.

MR WILLS: So they've been included. In terms of the main part of the project – of the presentation today was to respond to the IPC report and some of those key issues that we felt we needed to expand further out of the 47 recommendations. So we had the 47 recommendations there. That's the break-up of them. 12 in noise vibration blasting. I won't go through them all but I will take them as being read. So we will jump quickly into those, starting with noise – noise impacts and monitoring. We have assessed it having seven properties in acquisition; 19 in mitigation; 10 in management.

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I guess the key thing here is that we felt that the noise monitors that Wambo have in place currently will be suitable for monitoring the project going forward with five attended noise monitoring locations for compliance processes. We will use our trigger alarms, which are currently in use at Wambo, so that process is the same, and we will implement a noise TARP in response to the monitoring results. So the process is there, you know, with the existing- some of the question was around the network of Wambo. Is it valid for the project going forward and the answer to that was yes.

40

There were some questions around the mitigation and acquisition rights at the time. There were some areas around the Moses Crossing that initiated some change along the various iterations of the project. Back in the EIS, we had, as you can see there, R43 being in acquisition, models as being in acquisition, and we had the other properties, being R50, A, B and C, 56 and 133, being in mitigation. The Department of Planning did their own assessment. They then agreed with 43 being in acquisition but they then changed.

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They brought in R44 into mitigation, which previously wasn't in our mitigation management area – it was just in management – and they brought in, importantly, 50C into acquisition and that really revolved around the assessment of the PSNL for that particular area and that was based on a two-week snapshot of noise data where our modelling was undertaken across, I think, 1500-plus days that supported our PSNL that was there.

So we went back and did some more work with the Department of Planning. They then accepted our review. They then came back with another change which took 44 out of mitigation and back into management, and took 50C back out of acquisition and back into mitigation, but they did change R43 from being acquisition to mitigation based on their assessment of PSNL for that particular region.

MS KRUK: Can I just pause there – and the ambitions of those property owners? They would be aware of the fact that there has been long discussions, no doubt, about the status of their properties. Where are they at?

MR WILLIS: R44 spoke at the public hearing back in February - - -

MS KRUK: Okay.

MR WILLIS: - - - in opposition to the project and we have been in negotiations with the owner of R50C and we had made an offer for that property but that property is no longer on the market.

MS KRUK: Okay. So that's the most current situation on those properties?

MR WILLIS: Yes. That's right.

MS KRUK: All right. Okay.

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MR WILLS: One of the other areas – there are a lot of questions around the  
5 transition to joint venture from Wambo acting as its own entity, as it is now, to the  
transition to the joint venture. And we've gone through a lot of work in establishing  
phases for which the project will be managed. And as such, there will be different  
compliance to different consent instruments along the way. So, essentially, in phase  
1, for its entirety, which is then split into phase 1A and phase 1B, Wambo an United  
10 will be operating as two separate entities. So the United open cut will be operating  
on behalf of the joint venture. But from a commercial point of view, the  
arrangements are in place that Wambo continues to mine its open cut and meets its  
own financial obligations accordingly, during the time that the United project is  
being developed.

15 And once that project is developed to a point where it can deliver coal to the prep  
plan for the benefit of the joint venture, does the joint venture then take over control  
of the Wambo open cut. And that's commercial arrangements for that. And that's  
why we have this phase 1 and phase 2. So in phase 2 the joint venture is taking  
20 control of both the Wambo open cut and United, but in that intervening period there  
are two separate entities. So during that phase, for phase 1 for united, we will look at  
doing those type of activities that are listed in that table on the bottom left-hand  
corner of the screen, so cultural heritage, salvage and clearing, erosion ..... control  
works, construction of temporary mining and infrastructure areas that will be up in  
25 the northern compound area.

And I will show you that on a slide in the moment. It could be some of the works  
associated with the realignment of the power lines in the Golden Highway,  
construction of water management systems, extractions from the burrow pit to  
30 actually allow the construction of both roads, haul roads and the water management.  
So essentially we are in a construction phase during 1A. We are using mining  
equipment digging material, but the main process is relating to winning material for  
the purpose of constructing roads and water management infrastructure. When we  
flip over to phase 1B in United, we've essentially completed the construction of the  
35 water management and the haul roads, etcetera. And now our primary purpose is to  
win coal. So we would then flip into a different set of conditions, which will be  
managed when we're mining.

40 So in one sense we're under construction. In the next phase we're in mining. And  
that's when we will trigger along the way different environmental management plans  
and the consents will be managed. But during that phase in phase 1, Wambo will be  
operating in the Wambo open cut. It will be operating under its existing consent  
conditions. United will be operated in the eastern area. It will be operating under the  
consent conditions as granted under the consent, should that be granted. And if I  
45 jump to the next – so during those phases you can see there in blue United operating  
separately, in green Wambo operating on its own right.

We get to phase 1 – 2, there are changes that take place to the consent for Wambo to basically strip out the open cut actions from the Wambo consent and leave in it the underground and prep plan activities. And then the trainload out is a separate consent for Wambo and that will be adjusted just for the purposes of some  
5 modifications to the number of trains per day and a few other things. This is an image of how the phase 1A would look like. So in the north-western corner we have the brown polygon, which is Wambo continuing to operate in that area using the consent conditions as they stand today. Over here in the blue polygon will be the United start up for the joint venture.

10 And you can see here today the starter pit or the burrow pit being established, these roads being developed, so the relocation of the power lines and the commencement of the construction of the highway and also some water management. So that's essentially the principal activities there. And during that phase we will operate under  
15 a construction management plan and some other relevant management plans associated with biodiversity and the like, and a blasting management plan. When we move to phase 1B, you can see here that Wambo is still operating in its own right under its own consent and we are now expanding our activities.

20 So we're now – we've completed all those works and we're now dumping our material into the dump and we're principally there for the purposes of mining, as opposed to construction. Any questions with regards to the transition arrangements? And then when phase 2 – it's obviously – the blue area is the control of the joint  
25 venture and that is really where our limits and our control is for all of those activities. That will be falling within that blue area. One of the questions was around noise monitoring and how we account for the two different operations being conducted both during phase 1A and 1B, but also when we move into phase 2, because there will be the joint venture doing its open cut operations and there will also be the Wambo underground operating in its own right as well and how we look at that  
30 particular noise.

And, principally, we have a rule in place that if a noise complaint or monitoring results are coming from the Redmanvale Road area, which is up in this area here to the north, or if it's coming from the Maison Dieu area, it relates to the open cut. And  
35 if it comes from down in this region here, we need to do an analysis, which is what this diagram is demonstrating, around how we investigate the monitoring results. And we can then assign the accountable party through a single contact point for the community, saying, well, that is as a result of this action, which relates to the open cut, and it will get referred to the open cut, or it's this action which relates to the  
40 underground or the CHP and it will be referred to that different owner of that consent and then investigated, etcetera, so - - -

MS KRUK: Tony, if I may. To Gary: when you get to the rehabilitation component, I would be interested – because I found it really useful and I think for  
45 transparency purposes it has been really useful to have the transitioning process so well-articulated. That's a good piece of work. Could we also get – I need the confidence, in terms of in the rehabilitation phase, what the understandings are

between the various companies, where the risk is actually borne, whether that similar clarity of accountability and risk and benefit sharing is also understood.

MR WILLS: Yes.

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MS KRUK: And I'm sure it's included in your document somewhere, but just if you could highlight that.

MR WILLS: Is that around some of the commercial arrangements we have around rehabilitation of tailings dams, for example, which is a commercial agreement.

10

MS KRUK: Yes. Yes.

MR WILLS: But ultimately it sits with the joint venture, as the holder of the EPA. So we are not dissecting responsibility in a particular region from our regulator perspective. We're having that as a simple one party responsible for a region. And what sits behind that commercially is between the two joint venture partners, so - - -

15

MS KRUK: So when it - - -

20

MR WILLS: But I can cover that.

MR PEARSON: Yes.

MS KRUK: So when it comes to the end and you've got two voids and you've the articulated processes with the regional council, etcetera, etcetera, but also then in terms of the management of the regulatory issues at that point in time, just cover that, so that I'm sure that my understanding is the correct one.

25

MR WILLS: So from a point of view of accountability for final rehabilitation and final landform, essentially, the blue area will be the responsibility of the joint venture and the green area will be the responsibility of Wambo as underground and CHPP manager.

30

MS KRUK: Okay.

35

MR WILLS: So that's really – diagrammatically shows the accountabilities.

MS KRUK: The accountabilities as well.

40

MR WILLS: There are contractual arrangements that sit within this blue polygon here, that say, "Wambo, that was your tailings dam at the commencement of this joint venture. It's your responsibility to manage that." But the joint venture is taking regulation ownership of that particular issue.

45

MR .....: It's more a funding issue than an actual work scope issue.

MR WILLS: It's a commercial arrangement behind that.

MR PEARSON: Yes.

5 MS KRUK: Yes. Yes.

MR WILLS: So I think that would probably – does that give you the answer?

10 MS KRUK: Yes. That gives me a sense of it. But we will follow it on when we actually get to the discussions about some of the arrangements vis-à-vis the void, but  
- - -

MR WILLS: Sure.

15 MS KRUK: Yes.

MR WILLS: Well, the voids will be sitting within this area here and with this area here, which will be the responsibility of the joint venture.

20 MS KRUK: Okay.

DR WILLIAMS: Are they both – sorry, question. Sorry. The blue and green areas, will they still be managed by an integrated rehabilitation plan or management plan or will they speak to each other, the - - -

25 MR WILLS: They will speak to each other, in the sense that the contiguous final landform is a regional-based process. So we will manage those interfaces between ourselves. And the likelihood is that some of that work that will be conducted in the green area may be subcontracted to the open cut, for instance, to do the bulk  
30 shaping. But the responsibility from a regulated perspective will be it's Wambo's, but there certainly will be a very acute integration of those works around that.

MS KRUK: And they are enduring arrangements and I understand there are commercial leases involved here, but if there were a change of partners, this is a  
35 long-term project and the rehabilitation issues are obviously a lot longer issues.

MR WILLS: Yes, well – and there is a – there is a reason and I can't seem to get back – there we go. There are reasons why we have these separations here and that's  
40 due to the fact the underground succeeds longer than the – than the open cut, for instance. So we do need to have the ability for the open cut to do its work here but the – for the underground to maintain its operable assets during its timeframe - - -

MS KRUK: Yeah.

45 MR WILLS: - - - so we can't be responsible for rehabilitating all of that, which would include demolition and rehabilitation of the prep plan, for instance. So there are – but to answer your question in terms of those enduring requirements, it is – it's

sort of – it’s governed, essentially, by a final land form that – in this application which does cover this entire area, but – and which both parties really conform to and that’s - - -

5 MR PEARSON: I guess to - - -

MR WILLS: - - - that’s modified in the Wambo consent as well.

10 MR M. ALEXANDER: Yeah, I guess back to Gary’s original, sort of, opening, this is a joint venture over tenements as opposed to this project, so it does mean that at the end of this project so the joint venture survives beyond, sort of, what this initial works is.

15 MS KRUK: You would understand why my question - - -

MR WILLS: Yes.

MR ALEXANDER: Yeah.

20 MS KRUK: - - - I don’t think there’s any one of these meetings that the issue of rehabilitation and liability in, you know, sort of, the future is not a major issue.

MR WILLS: Yeah.

25 MS KRUK: I would be surprised if the public meeting doesn’t have that – some issues on that front too.

30 MR PEARSON: Well, I guess to follow up on Robyn’s point, though, that the back end that sits behind, essentially, the joint venture – so any subcontracting and parcelling out of the work – if a party to the joint venture disposes of its interest, presumably all those back end agreements are novated across – they’re stapled, essentially, to the joint venture, so they are also moved across to the new owner of the joint venture.

35 MR WILLS: From the commercials?

40 MR PEARSON: Yeah, so I guess just to follow up on Robyn’s question that if a party to the joint venture were to dispose of its interest in the joint venture, all of the back end arrangements that currently for – for example, allocate responsibility for x or y to Peabody would be novated to the new owner of Peabody’s interest.

MR WILLS: Yes, that’s reflected in the agreements which will - - -

45 MR PEARSON: Okay.

MR WILLS: - - - essentially, be picking up that - - -

MR PEARSON: Yeah. Okay. Yeah.

MR ALEXANDER: Yeah. It's a - - -

5 MR WILLS: - - - that obligation.

MR ALEXANDER: - - - shareholding arrangement.

MR PEARSON: Yeah. Okay.

10 MR ALEXANDER: You're picking up that.

MR J. MERRELL: So the applicant is United - - -

15 MR PEARSON: Correct.

MR MERRELL: - - - on behalf of the joint venture, so from a regulatory point of view, the consent would rest with United, who would be managing it. So from a consent point of view, United is responsible on behalf of the joint venture, if that

20 makes sense. So the commercial – obviously, the commercials sit in behind and I won't comment on that, but from a consenting - - -

MR PEARSON: Yeah.

25 MR MERRELL: - - - point of view, United is the holder of the consent and is responsible for compliance with the consent.

MR WILLS: That's John Merrell, for the purposes - - -

30 MR MERRELL: Sorry, John.

MR WILLS: - - - of the transcript.

MR PEARSON: Yeah. Actually – sorry. I should say that if you could just, the

35 first couple of times, just identify who you are if you're speaking for the first or second time.

MR WILLS: And it was Micheal Alexander before him. So - - -

40 MR PEARSON: All right.

MR WILLS: - - - the consent is essentially governing these obligations. The commercials sit behind that and they – a change in ownership means all the contracts giving rise to these joint venture agreements or the joint venture survive. Those

45 arrangements survive the change in ownership of the joint venture, but these obligations are sitting with the consent itself, so - - -

MR PEARSON: What about a solvency event, for instance?

MR WILLS: Solvency is treated as an action in the joint venture agreements which means that if it's one party, the other – there's arrangements in place for the  
5 succession of that other joint venture partner.

MR PEARSON: Right.

MR WILLS: If you're talking about both parties going into solvency issues, I mean,  
10 we haven't really contemplated that at the moment, but I guess - - -

MR PEARSON: Yeah.

MR WILLS: - - - the rehab - - -

15 MR PEARSON: Yeah, there's a bond for the rehab .....

MR WILLS: - - - security bond that will take care of the issue which I think you're  
20 exploring - - -

MR PEARSON: Yeah.

MR WILLS: - - - which is around the rehabilitation risk - - -

25 MR PEARSON: Yeah.

MR WILLS: - - - and that would cover that off.

MR PEARSON: Yeah. Okay.

30 MS KRUK: Thank you.

MR WILLS: From an air quality perspective, again, the question was around the  
35 suitability of the monitoring network and that monitoring network that's currently in  
place at Wambo we deem to be appropriate for the project going forward in terms of  
where those monitors are located. The project has committed to doing a campaign of  
PM2.5 monitoring in the local area, both in the Warkworth village as all – and also in  
the Redmanvale village was – which is to the northwest of the project area. We will  
40 have our trigger alarms in place on our monitoring network and, again we will have a  
TARP in response to how we will manage those exceedances through our monitoring  
network.

MS KRUK: Gary, if I may, the genesis of that, was that something that came up  
45 through consultations with the Health and other - - -

MR WILLS: From a 2.5 perspective?

MS KRUK: Yeah.

MR WILLS: Yes.

5 MS KRUK: I know that the – you know, that’s where the direction is clearly focused, but did you have work underway on that sort of basis that was a response to concerns?

10 MR WILLS: We did recognise that the only 2.5 monitor in the Hunter Valley is located within Singleton - - -

MR PEARSON: .....

15 MS KRUK: Yeah, I’ve heard that before, yeah.

MR WILLS: - - - so we did notice – we did note that, but through our consultation, there was discussion not just of PM10 but also moving towards - - -

20 MS KRUK: To 2.5

MR WILLS: - - - PM2.5. But that 2.5 assessment was already now air quality report and we were going to commit that anyway regardless of the feedback we received through stakeholder engagement but so it’s – it’s in some way responding to that feedback - - -

25 MS KRUK: Yeah.

MR WILLS: - - - but we had already recognised - - -

30 MS KRUK: No, because it has come up on previous inquiries - - -

MR WILLS: - - - the deficit.

35 MS KRUK: - - - I have done so I’m - - -

MR WILLS: Yes.

MS KRUK: - - - I was pleased to see it, actually, included - - -

40 MR WILLS: Yeah.

MS KRUK: - - - in a prospective piece of work.

45 MR WILLS: Sure. There was some questions around emission reductions and particularly around the adoption of Tier 4 equipment. Now, currently in Australia, there is only Tier 2 equipment available. The project has committed to purchasing

Tier 4 if it becomes commercially available, as long as it is fit for purpose and it does have the appropriate cost-benefit analysis. And - - -

MR PEARSON: Yeah.

5

MR WILLS: - - - we will baseline our non-road mobile diesel - - -

MR PEARSON: Yeah.

10 MR WILLS: - - - equipment emissions for the first year of mining so we can get a baseline for comparison. So that's - - -

MR PEARSON: Yeah.

15 MR WILLS: We will adopt reasonable and feasible diesel emission reduction technology and Tier 1 – Tier 2 to Tier 4 is one of those initiatives. From a biodiversity point of view, I want to go back to the points I made previously around what our – this is a Brownfields expansion. It's a significant benefit for a very minimal disturbance and we talk about 17 per cent of our total project area as being  
20 disturbed as a consequence of this particular project.

So you can see the numbers there. 3000 hectares is our total area. United additional disturbance, which is the area in the brown colour, which is that shaded area there and small remnants up here to the north is – that's 673 hectares. 150 hectares of that  
25 has been disturbed within the United previously. So there's a dam – water dams, there's tailings dams, there's box cuts, there's infrastructure, there's roadways etcetera that amount to that 150 hectares. So on balance, the net result is 530 hectares is being additionally disturbed, which is 17 per cent of our project area.

30 It does include 250 hectares of the critically endangered Central Hunter Valley eucalypt forest and woodland and, I guess, through our biodiversity offset package, we can demonstrate that we are accounting for not just the CEC, but we are accounting for all of our disturbance in a staged approach. So our proposal is to put forward the retirement of our disturbance in three stages. Stage 1 accounts for 80 per  
35 cent of our total disturbance and I'm pleased to say that we have all of our stage 1 offsets in place or will be available to be in place at the commencement of the project, should it be approved. And that's made up of a combination of five land-based offsets, one rehabilitation and also a modest contribution to the Biodiversity Offsets Scheme.

40

So we have, in our current stage 1 package, just short of 2400 hectares, which includes 1136 hectares of CEC, which gives rise to an offset of 4.6:1 ratio of our total disturbance of CEC for our offsets that we have already got established in stage 1. A CEC is a combination of both land-based offsets and mine rehabilitation. We  
45 don't have the opportunity to contribute to the fund for CEC offsets. The federal government doesn't allow for that under the EPBC Act. And that's – so the

Biodiversity Offsets Scheme contribution will be for non-CEC related plant community types.

5 Now, as I said before, we've continued to expand our biodiversity portfolio around land-based offsets. We've added the new Wambo South offset property. We're planning to use that for our CEC offsets in stage 2. However, we could – there are some plant community types that we could use to offset some of the shortfall in stage 1 that we're using the fund to make up the difference. So we have a way of dealing with that, but I think it's better suited to offset the CEC in stage 2.

10

DR WILLIAMS: Sorry, Gary – sorry ..... to - - -

MR PEARSON: You go, sure.

15 DR WILLIAMS: What's the – with Wambo South also coming through, then you add that to that – that stock of the CEC, what's the shortfall at that point?

MR WILLS: Of – so for stage 1, we have 100 per cent.

20 MR PEARSON: Yes.

MR WILLS: For stage 2, that will give rise to somewhere between 1500 and 1800 CEC credits. In stage 2, we need two and a half thousand credits – in stage 2. I think I have a table just here, so are you talking specifically to the CEC - - -

25

MR PEARSON: Well, that's where it seems to be really the problem, isn't it, with the EPBC problem?

30 MR WILLS: Yes. So we needed just short of 11,300 credits in stage 1, which we've got through the combination of the five land-based offsets in mine rehab. We then have 2500 in stage 2 and we have 620 in stage 3. So, you know, of that – you know, we're talking 3100 hectares remaining to go and we've already got a property that could give up to nearly 1800 credits. So, you know, we're over halfway there for stages 2 and 3 - - -

35

MR PEARSON: Okay.

MR WILLS: - - - with that South Wambo property.

40 MS KRUK: So that's a residual risk because of the unknown of the EPBC decision, isn't it?

MR WILLS: Correct. However, we won't be able to proceed under our proposal into stage 2 until we have 100 per cent of the offsets in place.

45

MS KRUK: So you've got to have the money – you've got to have the offsets - - -

- MR WILLS: The land in place - - -
- MR .....: Secured.
- 5 MS KRUK: So that is a hard barrier?
- MR WILLS: Yes. Correct.
- MS KRUK: I just want your understanding of that as well.
- 10 MR WILLS: Yes. It's a hard barrier. We cannot go through the gate from stage 1 to stage 2 until all of stage 2's disturbance offsets are in place.
- MS KRUK: And if there is no change in the Commonwealth policy about the use of market mechanisms, is the land available?
- 15 MR WILLS: Well, as you can see, we've demonstrated since February last year that we've been able to acquire three extra properties – so the Brozy property and the Jerrys Plains North offset sites and we've subsequently been able to identify another site, which is in the South Wambo region, which is in the land ownership of Wambo, but it has been included because it previously didn't have – it was predominantly buloke species in there. We didn't consider it previously but we've now considered it, considering that the buloke species is now an indicator for the CEC, so it's a like-for-like offset in that regard.
- 20 MR WILLS: Well, as you can see, we've demonstrated since February last year that we've been able to acquire three extra properties – so the Brozy property and the Jerrys Plains North offset sites and we've subsequently been able to identify another site, which is in the South Wambo region, which is in the land ownership of Wambo, but it has been included because it previously didn't have – it was predominantly buloke species in there. We didn't consider it previously but we've now considered it, considering that the buloke species is now an indicator for the CEC, so it's a like-for-like offset in that regard.
- 25 MS KRUK: Okay. Okay.
- MR WILLS: So - - -
- 30 MS KRUK: So in your risk assessment - - -
- MR WILLS: We believe we will be able to find land for that offset, should the policy not change. However, it's our own investment risk that we can't find it and, if we can't find it, we can't proceed to stage 2.
- 35 MR PEARSON: What about the – pardon me – the alternative scenario where there's – I think there's – I can't remember my notes – 2437 hectares in stage 1 that's being used as rehabilitation as an offset to the EPBC – the impacts to the – well, under the EPBC Act? If that rehabilitation fails all the way through till 2041 – because you've identified it as an offset, you can proceed to stage 2 and stage 3, but we get to 2041 and then we're in that 10-year kind of sunset clause under – I think it's condition B56. You then have till 2051 to demonstrate the efficacy of the rehab. What happens in 2051 if the EPBC rehab has just failed all the way through?
- 40 MR PEARSON: What happens in 2051 if the EPBC rehab has just failed all the way through?
- 45 MR WILLS: If it can't be recovered?
- MR PEARSON: Yes.

MR WILLS: Then the obligation in the current policy, which is permitted to have the rehab put upfront – if that does fail, the obligation – there’s two opportunities. One is to remedy the rehab. As you’re alluding to, you’re in a scenario where you’re saying it hasn’t been able to be salvaged, so the only alternative is we have to go and find other areas to = land-based offsets to make up that difference.

MR PEARSON: But – and – but how does that work, though, because if – is the tenuous sunset there is that’s a hard end date at which you are no longer able to pursue rehabilitation as an offset under the EPBC Act; is that right?

MR WILLS: I would have to take that question on notice, Tony - - -

MR PEARSON: Okay.

MR WILLS: - - - in terms of how that mechanism is actually managed.

MR PEARSON: Right.

MR WILLS: So I can’t - - -

MR PEARSON: And then my second question would be if at that point, that is a hard deadline, are you then compelled at any cost to acquire land or can you argue that you can acquire land on commercially sensible terms, if you like, at market value, if you want to call it that.

MR WILLS: Again, I would need to take that process on notice in terms of how that would be executed.

MR PEARSON: Okay.

MR WILLS: But I would expect it comes down to the obligation to meet those offset commitments regardless of - - -

MR PEARSON: Yes, okay.

MR WILLS: - - - really, the commercials associated with the acquisition of land.

MR PEARSON: Yes, so I guess, for me, is that – is 2051 just a hard stop date at which point rehab is out the door as an option and it’s just you have to acquire land – and what sort of meat is behind that obligation, if you like.

MR WILLS: Sure. I will take that on notice and come back to you - - -

MR PEARSON: Yes.

MR WILLS: - - - about how those mechanics work.

MR PEARSON: That would be helpful - - -

MR WILLS: If - - -

5 MR PEARSON: Very helpful, actually.

MR WILLS: I would expect it would be somewhat – it is hard, then it’s a hard rule. But if we’ve got rehab that’s showing promise of conforming to the standard, I don’t know whether there’s any flexibility in the execution of that.

10

MR PEARSON: No, because I think - - -

MS KRUK: You might want to highlight - - -

15 MR PEARSON: Yes.

MS KRUK: - - - what some of the progressive measures that – on the rehab are, and from my recall and from discussions with Planning, you’ve got both outcome measures that are stipulated but also some progress measures.

20

MR MERRELL: Yes, the completion - - -

MS KRUK: Is that correct?

25 MR MERRELL: That’s right. So the – in terms of the mechanism with government, there will be agreed completion criteria.

MR PEARSON: Correct.

30 MS KRUK: Yes.

MR MERRELL: And you will be measuring progress against those, and the other part of it is obviously - - -

35 MR PEARSON: Yes.

MR MERRELL: - - - until you demonstrate that you’ve met the completion criteria, there’s always going to be a security held over that commitment.

40 MR PEARSON: Correct.

MR MERRELL: And you won’t – they wouldn’t be able to relinquish the mining lease until that. So in terms of mechanisms that have a financial penalty attached to them if you don’t meet – so I take your point which Gary has taken on notice – but there is a mechanism for ongoing monitoring and financial security until you meet that point. So those mechanisms would stay in place until you meet the completion criteria or otherwise discharge your offset liability.

45

MR PEARSON: But – yes, that’s right, but so – so the – but the rehabilitation has a sunset clause of 10 – so this is condition B57.

MR MERRELL: Yes.

5

MR PEARSON: The rehabilitation has a sunset clause of 10 years at which point the department, unless it agrees otherwise, says, “Stop rehabilitating. It’s not working.” Under the New South Wales regime, you would make a payment into the – you know, the conservation fund or by land – I assume land – and there’s a process there, but under the Commonwealth legislation - - -

10

MR MERRELL: The - - -

MR PEARSON: I’m not entirely clear what happens there because you’ve run out of time on the rehab side of things because the New South Wales Government’s approval has run out. So rehabilitation is no longer as an offset for the – EPBC is no longer an option, and so then what do you do then? It’s not clear to me exactly how that - - -

15

DR WILLIAMS: I guess – sorry. Just to expand on that – and it’s a point we put to the department earlier on today as well – is – I guess it’s the timing of the vegetation rehabilitation plan. I mean, presumably, you’re not just going to have 10 years for the ecological mine rehabilitation. That would be commencing some years prior to that. So we’re just wondering what was the timing of the staging of rehab.

20

25

MR WILLS: Yes, look, Peter, the progressive – and I will just move to the final landform slide which is just here. So there’s areas that we will be looking to – so our ex-pit dump area is essentially in this region here. We would complete that dumping activity in year 6/year 7. During those – between years, you know, 2 and 6, we will be doing some progressive rehabilitation on certain slopes. So we will be establishing rehab which will be essentially permanent rehab areas as soon as years 2 and 3 of the project areas become available, and then we will continue to enhance that and rehabilitate other areas as they become available. So it’s not a leave a big dump, wait until it’s all finished and then start rehabilitation.

30

35

MR PEARSON: So it’s not like a - - -

MR WILLS: It’s a progressive program - - -

40

MR PEARSON: Yes.

MR WILLS: - - - that we – you know, we have targets that we set for ourselves - - -

MR PEARSON: Yes.

45

MR WILLS: - - - internally for meeting rehabilitation obligations. So our disturbance and rehabilitation ratios. Try to manage those - - -

MR PEARSON: Yes.

MR WILLS: - - - very well within the business, and we will be rehabilitating very early on - - -

5 MR PEARSON: Yes.

MR WILLS: - - - in the project commencement.

10 MR PEARSON: I guess I'm not worried about that aspect of it. I think that's your best case. I – from an approvals perspective, I'm worried about what's the hard stop.

MR WILLS: The fallback - - -

15 MR PEARSON: Correct, yes.

MR WILLS: - - - for non-conformance with the - - -

MR PEARSON: Everything goes wrong and what's the hard stop and what happens then.

20 MR WILLS: So at the moment, it is – land-based - - -

MR PEARSON: Yes.

25 MR WILLS: - - - is the only alternative - - -

MR PEARSON: Yes.

30 MR WILLS: - - - if we aren't able to continue with remediating or trying to salvage the rehabilitation.

MR PEARSON: Yes.

35 MR WILLS: So we will take that on notice - - -

MR PEARSON: Yes, please do.

MR WILLS: - - - around the mechanism of B57, and we will come back to the Commission if that's okay. So the – moving on from that biodiversity slide to the where are the offsets around our region, which is the question that Robyn had asked previously, we have five land-based offsets that have already been accepted by OEH and Planning. We have Highfields and mangrove which are up in the Greater Eastern Region Corridor. It's an initiative that was a fauna transfer corridor back in – John, how many years ago?

40

45

MR MERRELL: Part of the government's sort of conservation corridor priorities.

MS KRUK: The ..... yes.

MR WILLS: So that was – they’ve been acquired for some time by Glencore. Then closer to home – and that’s the area there but I’ve expanded the image so you can  
5 sort of get an appreciation for them on – from a size perspective. So we have Jerrys Plains north site just up here. We have the Wambo offset site which is just there. We have the Brozy property which is just here, and we have the Wambo South or the South Wambo offset – proposed offset site which is there. So the yellow area is our additional disturbance including the already disturbed 150 hectares. So that’s the  
10 680 hectares value there. You can see here we’ve got a large area, another large area, etcetera, which gets to our ratio of 4.6 to one from a CEC, but it’s actually a 4.6 to one from our overall disturbance to offsets ratio as well. So these offset sites here, I think, are highly valuable from a point of view of they are close to the project site, they’ve got connection to the Wollemi National Park. So they are, I think - - -

15 MS KRUK: So it’s connectivity.

MR WILLS: - - - from the point of view of - - -

20 MS KRUK: It’s a like for like equation. A quick one, in this area now, given I’ve lost track of what the property prices are, like, what are the merits of rehabilitation versus offset?

MR WILLS: Certainly, from a credit yield, we get less than half the value of a  
25 biodiversity land-based offset site from a credit yield point of view.

MS KRUK: Yes.

MR WILLS: So, you know, we’re looking at, say, some sites from a land-based  
30 perspective, we can get up to 14 credits per hectare - - -

MS KRUK: Yes.

MR WILLS: - - - from a land-based site.

35 MS KRUK: Yes.

MR WILLS: Whereas, mine rehab, I think we get to about five – 4.8.

40 MS KRUK: So that’s - - -

MR WILLS: So there’s - - -

MS KRUK: - - - the incentivisation - - -

45 MR WILLS: So - - -

MS KRUK: - - - despite the fact the land cost would be reasonably – would have risen.

MR WILLS: Yes.

5 MS KRUK: Yes.

MR WILLS: So - - -

10 MS KRUK: Yes.

MR WILLS: - - - you know, we are – we’re offsetting our disturbance through some of these land-based offsets.

15 MS KRUK: Okay.

MR WILLS: But we are providing a net increase in perpetuity locking up these particular - - -

20 MS KRUK: Yes.

MR WILLS: - - - land-based offsets but also putting back the disturbance that we are also putting on the site. So we’re putting back 878 hectares of mine rehab. A large portion of that is CEC - - -

25 MS KRUK: Yes.

MR WILLS: - - - but only yielding much lower credit. So from a point of view of return on investment, it’s a much higher cost for us to make that rehabilitation, but I think it’s also – it’s - - -

30 MS KRUK: It’s a necessary part of your management.

MR WILLS: Philosophically, I think it should be - - -

35 MS KRUK: Yes. Yes.

MR WILLS: - - - included.

40 MS KRUK: Yes.

MR WILLS: But also it’s in keeping with the policy as well.

MS KRUK: And just remind me, the tenure of the land that’s identified as offsets, what’s the arrangements you have with OEH on that basis - - -

45 MR WILLS: They will go into - - -

MS KRUK: - - - or the department.

MR WILLS: - - - stewardship agreements that will be enacted within 12 months of the commencement of the project. So we've already got them - - -

5 MS KRUK: Okay.

MR WILLS: - - - physically on the ground, and they will go into stewardship agreements that will be, you know, locked up in perpetuity.

10 MS KRUK: So they are in perpetuity?

MR WILLS: Yes.

15 MS KRUK: Again, I wouldn't normally ask, but given that you've got a joint venture arrangement here, hence the question, yes.

MR WILLS: Yes, so - - -

20 MS KRUK: Okay.

MR WILLS: That's more – that's a more detailed area of the South Wambo offset. So I – you know, they're some of the species that we've identified in the - - -

25 MR PEARSON: Yes.

MR WILLS: In that particular area.

MR PEARSON: And what's the timing on the OEH assessment?

30 MR WILLS: So we're waiting on the final report from Umwelt which the guys have only been out in the field in the last few weeks. So they're going through that, and we will be updating OEH and Planning in the coming month, I would expect.

35 MR PEARSON: Okay.

MR WILLS: And that will then require some ground truthing by OEH for the work - - -

40 MR PEARSON: Yes.

MR WILLS: - - - that our team has done, but it's another good offset site that we've added. And it does yield some significant plant community types. We've talked about the retirement process - - -

45 MS KRUK: Yes.

MR WILLS: - - - for our earlier – so we’ve got three phases. The blue area represents about 80 per cent of our total disturbance. Stage 2 is the brown area and stage 3 is that small, pink-purple area in the middle of the slide. So stage 1, 80 per cent of our disturbance, we already have offsets in place for. So I think that’s a good news story. I won’t go through the table. I will take that as being read - - -

MR PEARSON: Yeah.

MR WILLS: - - - in terms of where - - -

DR WILLIAMS: Gary, sorry, can we just go back – please, sorry, just back to the - - -

MR WILLS: Yeah.

DR WILLIAMS: So all credits for stages 2 and 3 will be retired before commencing disturbance within those areas?

MR WILLS: Yes. So before we move into any mining activities or disturbance activities in that brown polygon which is the stage 2 disturbance area - - -

DR WILLIAMS: Yeah.

MR WILLS: - - - we cannot commence any activities until we have all of the - - -

DR WILLIAMS: Yeah.

MR WILLS: - - - offsets for stage 2 in place.

MS KRUK: In the bank.

DR WILLIAMS: Yeah, I – okay. That’s good. Thank you.

MR WILLS: There was a discussion around the – how the EPBC offset obligation had been assessed. It’s a bilateral agreement. It has been conducted by OEH on behalf of the federal government – or the Department of Energy and Environment. There has been no significant issues raised thus far through our consultation with DOEE and we have, as I said, all requirements for stage 1. And notably, the FBA has no limits on the use of mine rehabilitation in terms of how much mine rehabilitation you can include in your offset package.

But we proposed a self-imposed limit of 25 per cent for CEC and that took on board some – encompassed some feedback from the Department of Energy and – Environment and Energy at the time around the UHSA policy that was the interim policy that was out in the domain. And we took on board 25 per cent. We’re actually now at a point with just our five land-based offsets to limiting that to 17.

When we add the South Wambo project, that number will reduce again and that will come under 15 per cent. So - - -

MS KRUK: Do you anticipate that will be well received?

5

MR WILLS: We expect so. The four species for the controlled action for biodiversity, as I said before, is the CEC, the regent honeyeater, swift parrot, spotted quoll. You can see there the ratios for which we have already got our offset package in place for 4.6:1 on the CEC. Regent honeyeater up to 7. Swift parrot, we're at 16:1 and the spotted quoll, we're at 4.2:1. And, essentially, this – the fauna offsets exclude mine rehab. It's only land-based areas.

So if we were to include mine rehab, those numbers would increase, but essentially, when you find CEC, you're finding the suitable habitat for those particular species as well. We had some work – some questions around our ability, essentially, to deliver on our mine rehabilitation program to both the CEC level and also the other remnant woodlands that we are proposing in our rehabilitation or final land form package.

We presented to the Commission last time a report – a public report from Glencore that documented our rehabilitation results across all our sites within the Australian portfolio. And you know, there was a study done by Umwelt in 2017 that looked at four sites within the Hunter Valley where they weren't planned to deliver on the CEC for Central Hunter Valley eucalypt forest woodland.

However, they did demonstrate they were starting to conform to those particular – to that plant community type. So I guess not by accident, but inadvertently, we have delivered on that species. I guess I am confident that when we purposely go about rehabilitating to that particular community, we will be able to deliver that CEC, based on this study. And we've talked about that retirement issue before, Tony, that we have taken on notice - - -

30

MR PEARSON: Yeah.

MR WILLS: - - - around what happens if the rehab isn't - - -

35

MR PEARSON: Yeah.

MR WILLS: - - - delivered and the only option at the moment, under the EPBC Act, is to - - -

40

MR PEARSON: That's right.

MR WILLS: - - - acquire land. Our final land form – you can see there a contiguous final land form across this particular region. We have some fauna corridors. One to the north, one across the middle of the site and also heading back down to the Wollombi Brook. They connect up to the national park to the southwest and also to other mine rehabilitation programs at a neighbouring – that neighbouring

45

operations and Hunter Valley operations in particular. You can see the location of the final voids in this particular slide here.

5 Robyn, you had a question on that previously. And it's not visible within here, but there are tailings dams that are existing currently. They will be rehabilitated and dumped over as per the plan. Those are those commercial arrangements that sit behind the obligations. So the obligation for us is to rehabilitate all of this site, excluding the hatched area here, which will be the responsibility of the underground operation and the CHPP. And so you can see there that there's some rehabilitation that's contractually – commercially responsible for one joint venture partner, but the  
10 JV – or United - - -

MR PEARSON: Yeah.

15 MR WILLS: - - - representing the joint venture is still holding the responsibility  
- - -

MR PEARSON: Yeah.

20 MR WILLS: - - - from a regulation perspective.

MR PEARSON: The haul road for the underground, is that – that's in the hatched area, is it? So from the - - -

25 MS KRUK: Yes.

MR PEARSON: So the Peabody access is not diminished or impacted by the rehabilitation that will take place in 2041?

30 MR WILLS: To the main industrial area from the highway or the - - -

MR PEARSON: No, no, no, no. From the - - -

35 MR WILLS: - - - one out to the south base?

MR PEARSON: The long wall – so the south base long walls - - -

MR WILLS: Yes, yes.

40 MR PEARSON: - - - up in the top left, the haul road – I just can't remember the configuration of the site.

MR ALEXANDER: Yeah, it's concluded by then.

45 MR PEARSON: I see. So that long wall is the - - -

MR ALEXANDER: Yeah, so the operation is on the eastern side.

MR PEARSON: Okay.

MR WILLS: Yeah, so the underground from Wambo, currently in this area here.

5 MR PEARSON: Yeah.

MR WILLS: It will then move over to the South Wambo development, which sits in  
- - -

10 MR PEARSON: Okay.

MR WILLS: - - - underneath here. And that's in early 2020s – mid-2020. A lot of  
work was done on filling in the final voids which came out of the IPC review. We  
went back and looked at the cost of filling in both voids and that came to the sum of  
15 777 million. A seven per cent discount rate came to in the order of 140 million NPV.  
There was some documentation by Deloitte Access Economics around the social  
cost of capital.

Really, should be reflecting at the four per cent, but we've provided a range of both  
20 four per cent, seven per cent and 10 per cent in the report so that those numbers are  
there to be digested. I guess the key thing is we're looking at moving in 150 million  
cubes of material to fill both voids in. That material would need to be sourced from  
any adjacent dumps in the mine life, so we would be then continuing mining  
activities beyond the planned closure period for another six years to rehandle that  
25 material.

So there would be re-disturbance of existing spoil of dumps and then being placed  
back in the pit. In doing so, you know, we – in one of our earlier versions, we talked  
of a number of 450 million. Then it moved to 630 and then we moved to 777 and  
30 I've got a reconciliation of that, which was one of the questions - - -

MR PEARSON: Yeah.

35 MR WILLS: - - - from the last meeting - - -

MS KRUK: .....

MR WILLS: - - - which is at the back of the document.

40 MR PEARSON: Yeah. Great.

MR WILLS: So I will wait until we get to there, Tony.

45 MR PEARSON: Yeah.

MR WILLS: But, essentially, the \$777 million only returns 111 hectares of useable  
land, because it's not the void in its entirety, it's only that water recovery level.

Some of the slopes going into that void are still useable from a biodiversity conservation – this is remembering this – these two final voids are sitting in a biodiversity offset site, so they’re – the whole site’s future purpose, with the exception of some little grazing areas to the north and to the west, is a biodiversity offset site. The reusable land, which is the groundwater level, would be 111 hectares. That calculates at around \$7 million per hectare to rehabilitate that – to gain those 111 hectares, which I think is a - - -

MR PEARSON: That 777 and 111 hectares, if you split that into the costs for United and for Wambo - - -

MR WILLS: So it’s - - -

MR PEARSON: - - - and then the hectares for the United and Wambo, what would that look like?

MR WILLS: So it’s \$600 million or thereabouts for United - - -

MR PEARSON: United, yeah.

MR WILLS: - - - and it’s 177 or 176, I think, for - - -

MR PEARSON: Yeah.

MR WILLS: - - - Wambo. The useable hectares, I think they - - -

MS FARNON: It’s 24 for Nortres and 87 for United.

MR PEARSON: Right.

MR WILLS: And we will talk about – we had a question on that - - -

MR PEARSON: Okay.

MR WILLS: - - - later on in the presentation.

MR PEARSON: Still about that – so both are still about that 7:1 - - -

MR WILLS: Yes.

MR PEARSON: - - - cost to hectare ratio?

MR WILLS: Yeah, that’s correct. Yeah.

MR PEARSON: Yeah. Okay.

DR WILLIAMS: Sorry, Gary, you mentioned that was – that also the voids are sitting in the offset site. Does that - - -

MR WILLS: Yeah, so if we go back to the - - -

5 DR WILLIAMS: Yeah.

MR WILLS: - - - final land form.

10 DR WILLIAMS: Yeah.

MR WILLS: So this is essentially – so we’ve got grazing land here in the north - - -

DR WILLIAMS: Yeah. Yeah.

15 MR WILLS: - - - and we’ve got some other grazing land there. The rest of this would be a woodland rehabilitation area, so it’s – and portions of it being rehab conforming to the CEC and biodiversity. But it’s essential – this entire site is for returning to woodland, so it has got no – you know, the area you gain here isn’t

20 going to be prime agricultural land that can be deployed for some other economic purpose. It’s sitting within a biodiversity offset site.

DR WILLIAMS: Is a part of the mine ecological rehabilitation? Is that - - -

25 MR WILLS: Well, not the voids themselves.

DR WILLIAMS: No, that’s not ..... - - -

MR WILLS: But this area around it is.

30 DR WILLIAMS: Yeah.

MR WILLS: The only value that this would add would be you would be getting back some more biodiversity offset lands, which would cost you \$7 million a hectare.

35 MR PEARSON: And so – but it might detract – could it detract from the rehabilitation that’s being used as offsets? Because I imagine you will have to disturb - - -

40 MR WILLS: We would have to disturb this ex-pit dump area - - -

MR PEARSON: Okay.

MR WILLS: - - - through here.

45 MR PEARSON: Right. And then – so that would delay the – I guess the introduction, essentially, of the rehab.

MR WILLS: Correct.

MR PEARSON: Okay.

5 MR WILLS: And that would mean that we don't get the time to establish and to demonstrate the conformance of those species, particularly around that question for the CEC.

MR PEARSON: Okay.

10

MS KRUK: Tell me the use of that land. I know that you've entered – or are discussing agreements with council about future use of sites of this type. What are the restrictions, if it has actually been rehabilitated for the CEC purposes?

15 MR WILLS: In terms of accessing these voids?

MS KRUK: Yes. Yes.

20 MR WILLS: Well, that would be – that would require some carve-outs for access tracks, and the like, but it wouldn't have a material impact on the total area that's being contributed. Not all of this site is for CEC; it's only that section through there.

MS KRUK: Only that bit there?

25 MR PEARSON: Yes.

MS KRUK: Yes.

30 MR WILLS: So, that's the area that's relating to the CEC. The rest of it is just woodland. There's a pre-existing commitment for the Wambo EPBCC referral, which was 1500 hectares of woodland community. So - - -

MS KRUK: Sorry, Tony. Thank you.

35 MR WILLS: This is showing the level of work that we've gone through around assessing how we can treat these voids, or what would happen in the mine planning process. So we looked at what's a reasonable and feasible mine design. Is there a reasonable and feasible engineering design associated with each one of these options? Is it economically feasible to do so? And then, as a consequence, we  
40 conclude whether it's proposed or not proposed. And we can work through from being – of having three voids – and we felt that that wasn't reasonable and feasible, to have three. We felt that, considering that the approved two final voids would be appropriate. We had two final voids, but the – having the united void located  
45 adjacent to the Wollombi Brook, and again we felt that wasn't appropriate, so we pursued the mining direction that started in the south-east and moved to the north-west.

We had another one, where we directed flows from the North Wambo Creek into the Wambo void, connecting that then to the united void, etcetera. And we ruled those out due to both engineering and feasible reasons. We then looked at how we're connecting the final voids, which we could possibly do, but we don't believe, engineering-wise, it was feasible to do so – and particularly from a safety perspective. If the project does not proceed, then we still have two final voids in the final landform, as it currently stands. And I guess that's one of the main points I would like to emphasise – is that this project will maintain the same number of final voids, of a similar size, but in a slightly different location, but also unlocking 150 million run of mine tons, \$370 million worth of royalties and those economic activities which amount to \$3 billion of State Government gross state product.

So we are – if this project doesn't proceed, the landscape will be the same, with two final voids in it. We looked at one void, and we felt that it wasn't economically feasible to join those together, and then we had no voids, which backfilled, which is the work we've done, which is that \$777 million. We have got three other options that are both reasonable and feasible from the mining and engineering perspective, and from an economics. Some of those relate to process about how we can either increase the catchment size, which will try to improve the water quality in the final voids, but it will then mean that we're going to be limiting off-site – surface water going off site and reaching the Wollombi Brook, ultimately.

We had another one where we designed a – in a flood-flow for the Wollombi Brook, we would excavate a channel, which would allow backfilling of the water in flood conditions into united, improve the water quality from that perspective, and then that would ultimately only give rise to managing the water quality, which is still sitting at around – in our base case proposal, we're using two final voids, no connection, minimising the catchment area – they act as saline groundwater sinks – and the water quality gets to in the order of 15,000 to 17,000 micrograms per seamen.

MR PEARSON: Yes.

MR WILLS: Now, if we do one of these two initiatives, it improves that, but it doesn't give you a marked improvement, and I think there's a greater cost associated with diverting that water to those voids. So, our proposal is: maintain the two final voids, just a different location. And we've minimised those as much as possible. There was a few other questions around water generally – visual impacts and transition to joint venture – and we covered these off last time.

MR PEARSON: Yes.

MR WILLS: And I don't think there's any significant issues to go through here, so I will take that slide as being read.

MR PEARSON: Robyn, are you happy on the IECS stuff or did you - - -

MS KRUK: Yes. It was more – I’ve read with interest your discussions with it. Have you in principle dealt with each one of the IECS committee’s advice? You undertook further GO assessments. What were the outstanding issues? Summarise for me the extent to which all of those issues have been addressed, because I gather there’s no loop back to the independent committee.

MR WILLS: No. John, I think you’re best to comment on those. But we obviously did some more work around stygofauna and groundwater.

10 MS KRUK: Yes, I saw that.

MR WILLS: Dependent ecology.

MR MERRELL: Look, I believe that they were all addressed and obviously all that information went to planning and back to the New South Wales government agencies, who reviewed the responses to the issues that the ISF raised. But there was additional sampling and analysis done. There was the geochemical study. There was some more stygofauna work. And then there was – a lot of their questions related to – or a number of their questions related to matters around model construction and calibration, sort of quite technical questions from their technical reviewers. And all of those were addressed and responded to. So I believe that they were all addressed in detail and addressed appropriately. So I’m not aware of any outstanding issues from any of that, so we will certainly take it on board.

25 MS KRUK: I just – yes, I never underestimate in the Hunter region that water is always an issue.

MR MERRELL: Yes.

30 MS KRUK: And particularly at the moment I gather there are community meetings on that issue, from what I hear from other sources. I’m just thinking, from my reading you have as well – it was more the closure of the loop on that basis.

MR MERRELL: Yes. Look, I suppose where it’s – part of the integrated process is the New South Wales agencies are doing – taking the advice and doing the review. Certainly the New South Wales agencies have indicated they – I mean, they have reached the point where all their issues were addressed and they’ve made recommended conditions. But, as you said, it doesn’t go back to the IESC, so we don’t have anything directly from them to say they are happy. But certainly the agencies who are doing the review, we understand that we’ve addressed all the questions.

MS KRUK: Can I – and it’s more a question to inform my general understanding. Given I presume you have water licences with a very high level of security up there, yes.

MS FARNON: Yes. Yes.

5 MS KRUK: And given there are issues in terms of water access at the moment state-wide and nationally, is there – in your future planning is it ever contemplated that that saline water could be reused for other purposes? Has that been factored in various scenarios and is there anything in the current conditions that would preclude those options being investigated.

MS KRUK: Included in our application was to utilise – to extract water from our underground workings.

10 MS KRUK: Yes.

15 MR WILLS: And so we have requested that, which I believe will be forthcoming, if the project is approved. So that would give rise to us utilising that saline water from the underground – from the groundwater, as opposed to drawing on our water licences out of the Hunter River.

MS KRUK: So that's built in at the moment. I hadn't picked that up. That's interesting.

20 MR T. WALLS: It's Tim Walls from Glencore. In the neighbouring conditions for some of the neighbouring mines – like, HVO does have conditions that it can transfer water backwards and forwards with one bow. So, in effect, if – effectively, you could transfer that water to a neighbouring mine.

25 MR WILLS: And that's mine water or raw water, as opposed to water from the Hunter River. So that's mine that has been collected. So it has got a salt load – elevated salt load in it.

30 MS KRUK: Right. Thank you.

35 MR WILLS: As per the agenda, there was a request for an update on the VPA. And at the time of the presentation to you, we did note that we got the report back from GLN. I would still like to make the statement that I don't agree with the methodology adopted - - -

MS KRUK: I think I read that in a number of places in your submission.

40 MR WILLS: - - - adopted by GLN. I think it was merely an exercise in comparison, as opposed to assessing the discrete impacts of our project. So I would like that noted for the record. However, we have accepted - - -

MR PEARSON: We will not redact that part of the transcript.

45 MR WILLS: No. It's not intended to be redacted, Tony. We have also – as a consequence, we've accepted the 2.65 recommendation from GLN. We have subsequently sent a letter to Singleton Council on 5 December. And we have agreed with Singleton Council that that would be shared fifty-fifty between the - - -

MS KRUK: So the disbursement is also agreed.

MR WILLS: Yes. That's the local impacted area and the balance to go to the wider LGA. That component going to the LGA – the broader LGA, we have agreed with  
5 counsel that they can, if they see fit, put that to the development fund that they're in the process of implementing.

MR PEARSON: Yes.

10 DR WILLIAMS: Has council responded to that letter of 5 December?

MR WILLS: Not formally responded. However, we have had – I've had  
discussions with the general manager with regards to that and, more importantly,  
15 around the allocation of the broader LGA component and not placing any restrictions on that and letting it go to the fund.

MR PEARSON: So have you seen an updated drink of appendix 9? That's the VPA appendix.

20 MR WILLS: No.

MS A. JELFS: I don't think it has been done yet.

MR PEARSON: It hasn't been done yet. Okay. Okay.  
25

MR WILLS: So that's the update on the VPA? I'm assuming council will agree with that statement.

MR PEARSON: Yes, I hope so.  
30

MS KRUK: Were there any other residual issues with council that you're aware of?

MR WILLS: No. No. So we've made some commitments with council around our  
final landform planning process, where we will consult with them from our final  
35 landform plan. And so that has been accepted by council and also accepted by the Department of Planning. And as regards to that, I'm not aware of any other issues outstanding with council.

MR PEARSON: Okay.  
40

MR WILLS: So then I move to addressing the matters from the meeting from 6  
December, which, sort of, listed, sort of, five key areas in response to the IPC  
recommendations. One of the questions that came from Alice at the last meet related  
to the fume project and whether the fume trial that we've got planned for the first  
45 two years of operation, whether the rock characteristics during that trial period will be reflected in the life of the mine rock characteristics and particularly at depth.

5 So during the first few years of operations, we really only get down to this particular depth here, because we're still working in and around the power lines. So we can't push down straight away. We will have a higher proportion of weathered material during that particular period, which will obviously have – which has a higher clay content, which could give rise to a higher fume component. However, importantly – and I think the question from Alice really revolved around these inter-burden rock characteristics here, whether they are reflective or similar all the way through the strata. And the answer to that question is yes.

10 MR PEARSON: Yes. Okay.

MR WILLS: It's a lot of dot points there to have that simple answer, but that's the answer.

15 MR PEARSON: That's good.

MR WILLS: With regards to the greenhouse gas emissions, there was a question around what measures do we consider not to be technically feasible and financially reasonable. And Aislinn is going to talk to these points around what we could potentially do, but we don't see as being reasonable and feasible.

MS FARNON: We outlined four of those, so the first being the pre-drainage. And that was ruled out due to the significant lead times to complete that program. We also looked at biodiesel use and we've ruled that one out due to fuel use efficiency issues and warranty issues on site.

MR WILLS: And just on that point, we don't really know how biodiesel will operate within a tier 4 engine, should the tier 4 engines be implemented at site at some point in time either. So that's another unknown for us.

MS FARNON: Yes. Replacing trucks with conveyors is a very efficient way of doing it, but for us it's not as effective or feasible, because of the haul distances. So we were unable to implement that as a reduction measure. And the last one, electric drills and shovels are also not efficient for us, due to the supply of electricity and the working areas within the open-cut pit. So it's more we will be using excavators and loaders, as opposed to electric shovels.

MS KRUK: The question we posed to the department this morning was in effect the – as circumstances change, both economic and environmental, and the understanding or the latitude was in effect for these – you know, your policies and your practices to change. Do you want to comment on that same issue?

MR MERRELL: I think one of the draft conditions – I'm working from memory here, but – was that all reasonable and feasible measures have to be put in place. And that obviously is a recurring condition that applies at all stages. So if there's something considered reasonable and feasible in 10 years time that's not now, that condition would apply.

MR PEARSON: It's B28.

MR MERRELL: And there will be an ongoing requirement to demonstrate that.

5 MR PEARSON: B28(a). And I think the other thing – just to pick up on Robyn's  
point – was B28(b) which was ensuring that any new non-road mobile diesel  
equipment commissioned for the development includes reasonable and feasible  
diesel emissions reduction technology endorsed by the EPA. I think we expressed a  
10 concern that the use of the word “new” perhaps limited equipment to being new, so  
second-hand equipment or other equipment used from other sites being transferred  
may not be subject to this obligation. So I think the proposal now it is to kind of  
broaden that to include not just new but any equipment that's introduced to the site.

15 MS KRUK: Do you want to take that on board?

MR WILLS: We will take that on board. I - - -

20 MS KRUK: You understand the intent of it is to endure that it's an ongoing  
discussion because some of the issues are supply-side economics in relation to  
what's available in the domestic market in terms of equipment and at the moment I  
think that's the issue you've identified as triggering the “technically feasible”  
component.

25 MR WILLS: Sure. I guess – a brief comment on that particular point around the  
imposing those limitations on any equipment introduced to site, you know, we might  
have mines that will be closing which will have equipment that is mid-life. Is it  
reasonable and feasible to expect that that equipment be parked up and not  
transferred to this particular site because it doesn't have the most up-to-date  
30 technological advancements in emissions reductions?

I don't think so because it's, you know – there's that investment both from a  
financial perspective but also the greenhouse gas emissions in terms of creating that  
asset in the first place. I think it would be unreasonable and certainly not feasible to  
not allow that piece of equipment to be utilised going forward. Alternatively, we  
35 would have to park that asset up with residual value and go and purchase a brand  
new piece of equipment to come into place to do that task.

40 MS KRUK: You want to take it on board – you already committed to the baseline  
monitoring of diesel and diesel emissions - - -

MR WILLS: Yes.

45 MS KRUK: - - - so it's an issue of increasing concern ..... so have a – you are aware  
of the issue that has been raised with us, then, so please come back to us if you have  
any comments you want to make on that or other ways where that intent can be  
mirrored. All right. We talked this through this morning with Planning, these  
provisions. I understand where you're at at the moment, so - - -

MR WILLS: One of the questions around air quality, and particularly the question around mine-owned properties and having – have we had any experience in the last five years of a tenant exercising their rights under the tenancy agreement, and he answered that question with a “no” for Glencore and I think it’s also a “no” for Peabody.

MR JAEGER: Peter Jaeger from Wambo Coal – as per the last meeting that was a “no” as well for the approach.

MR WILLS: However we have committed to including that particular ability for exiting those leases in our - - -

MR PEARSON: I think the discussion last time – again, it came up in the department meeting – but it was to broaden the termination rights of the tenant to be for any reason, not just for air quality reasons, and then – so that worked from the consent to the lease agreement, and then from the consent – from the lease agreement into the consent was 14 days, so to harmonise, essentially, 27B with your release conditions to reflect the termination right for any reason and to reflect the 14-day notice period.

MR WILLS: Okay. In regards to biodiversity, the question was around how will the proposed rehabilitation work as an offset, including how would rehab success be measured – assessed in the transition between the three – we already talked a little bit to this previously and it arks back to that question around what happens to the risk associated with delivering on the CEC. We certainly – if we have mine rehab that’s non-CEC, we have the alternative of going into the fund or buying land for the CEC.

As you know, it’s only with regards to land or continuing to do the rehabilitation and I guess the ongoing monitoring – so, first of all, that it is within the policy to allow us to retire our credits for rehabilitation upfront; that’s per the policy. The ongoing monitoring and the rehab will be undertaken and we will assess against performance criteria for which we do report annually and that criteria is included in the bar and will be included in our rehab management plan and also ..... and I guess as we identify issues, we will work to improve that rehabilitation in the short-term and not leave it to a problem at the end of the mine life. And we’ve talked about that last point around the process for what our alternatives are which for the CEC is continue rehab or land-based offsets.

MR PEARSON: How – like, how – when we – I guess one of the concerns we had last meeting were if there’s – you know, there’s lots of land out there and it’s capable of being acquired at a reasonable cost, then the risk of rehabilitation, for instance, failing as an offset strategy for EPBC is a lot lower. If, for instance, there’s 174 hectares and it’s very expensive, then obviously it sharpens the mind around that risk. So one of the things we did ask was around just how much land is there out there that’s capable of discharging this obligation and what are the kind of cost metrics involved in acquiring that land?

5 MR WILLS: The only point of reference I have is to the properties that were acquired in recent times being the Brozy property and the Jerrys Plains properties and, you know, they are at relative – we are paying a premium for those sites because they – you know, there is an understanding of – the highest and best use concept is not as agricultural property but as biodiversity offset land.

MS KRUK: Yes.

10 MR WILLS: So we are paying a premium for that element. So it's – it really comes down to the – that principle of the highest and best use at the time, Tony.

**CONTINUED IN TRANSCRIPT-IN-CONFIDENCE**

**CONTINUED FROM TRANSCRIPT-IN-CONFIDENCE**

5 DR WILLIAMS: Sorry. Just to clarify – sorry, Gary – the offset sites that you’ve got, you’ve purchased the lot of them, have you? You’re not doing them through just a BioBanking – the normal BioBanking scheme?

10 MR WILLS: No, no. We have acquired the Wambo offsets are already under ownership within Wambo.

DR WILLIAMS: Yes.

MR WILLS: So that’s the Wambo offset and the proposed South Wambo offset.

15 DR WILLIAMS: Yes.

MR WILLS: And then the Brozy property and the – the Brozy property we’ve purchased as tenants in common, but the Jerrys Plains, the Highfields and the Mangrove sites are owned outright by Glencore.

20 DR WILLIAMS: Okay. So there’s no BioBanking sites available in the area?

MR WILLS: That we could utilise?

25 MR MERRELL: Not that have available credits. There’s still some – we keep an eye on the credit market and they do come up from time to time for people that have properties that are looking, but at the time – I can’t talk for right now, I haven’t done a search lately – but we did do searches - - -

30 DR WILLIAMS: On the register?

MR MERRELL: - - - earlier in the register of what was available.

35 MR PEARSON: How much land out there – what’s the opportunity set here in terms of - - -

MR WILLS: For CEC in particular?

40 MR PEARSON: Yes.

MR WILLS: From – I guess is your question heading towards the scarcity discussion?

45 MR PEARSON: Yes, yes. So is there 1000 hectares of land that could fit the bill, or - - -

MR WILLS: Look - - -

MS FARNON: It was at well over 30 was in the valley but that's owned – a lot of that is owned privately.

MR PEARSON: 30 what, sorry?

5 MS FARNON: Thousand hectares – that was – yes.

MR PEARSON: 30,000 hectares. Okay.

10 MS FARNON: What was their - - -

MR MERRELL: We – I can't remember. We will take that on notice to – but we did do work - - -

15 MR WILLS: We will take that on notice, Tony. The largest landholder of CEC is the – is the Defence Department.

MS FARNON: Yes.

20 MS KRUK: Have you contemplated having agreements with them? That's something that I've heard discussed in other parts of the country.

MR WILLS: We haven't at this point at this project specific level. I'm not sure within Glencore and Peabody whether we've had a higher level discussion, Robyn, but it's certainly something that could potentially be secured.

25 MS KRUK: Because – and I think they're increasingly aware of the fact that they are a major biodiversity bank in many respects and it's how they manage that resource. I( didn't even realise that they had – that they've got quite considerable holdings here, haven't they?

30 MR WILLS: They do, yes.

MS KRUK: See, it's – the issue for us on any of these projects is the backdrop of the rate of land clearing in the state and I have no doubt that will be raised with us, you know, through some of our submissions as well. So that's why we focused you quite deliberately on the regional context and how you – you know, what is it and hence obviously the detailed focus on rehabilitation versus offsets because it will be a vexed issue ..... vexed issue.

35 40 MR WILLS: Yeah. And I guess I'm conscious of the concern around the risk of not delivering - - -

MS KRUK: Yeah.

45 MR WILLS: - - - but as we demonstrated in our last meeting and through the publication we gave you, we have got a track record, between both Glencore and

Peabody, on delivering on rehab and delivering on rehab to a specified standard and then, inadvertently, delivering on a standard in four examples in the Hunter Valley where it has exceeded that and delivered on the - - -

5 MS KRUK: Yeah.

MR WILLS: - - - conforming to the CEC. So I have a high level of confidence that we can deliver on our commitments in our rehabilitation plan. The backstop is if it doesn't work, we have to buy more land - - -

10

MR PEARSON: Yeah.

MR WILLS: - - - and that comes to your scarcity discussion around whether - - -

15 MS KRUK: Yeah.

MR WILLS: - - - that land would be available.

MR PEARSON: Yeah.

20

MR WILLS: And we will take that on board around demonstrating what the available pool of that type of land is and even, hopefully, going to a level of understanding of the - - -

25 MR PEARSON: Yeah.

MR WILLS: - - - holding interests in that, whether it's - - -

MR PEARSON: Yeah.

30

MR WILLS: - - - you know, Department of Defence or - - -

MR PEARSON: Yeah.

35 MR WILLS: - - - another government body or whether it's private ownership. So we will - - -

MR PEARSON: Yeah. Okay.

40 MR WILLS: - - - take – we will come back to you on that.

MS KRUK: Thank you for that.

45 MR PEARSON: Could I – I presume the rehabilitation bonding won't extend to acquiring land-based offsets. It will just be there for - - -

MR WILLS: It's purely for the disturbance and - - -

MR PEARSON: Correct.

MR WILLS: - - - that, really, is an action against an insolvency event - - -

5 MR PEARSON: Yes. Correct. Yeah.

MR WILLS: - - - so that's protecting that. It doesn't - - -

MR PEARSON: Yeah.

10 MR WILLS: - - - have any standing with regards to biodiversity offset sites.

MR PEARSON: Yeah, yeah. Okay.

15 MR WILLS: And I guess – I come back to the fact that our staged approach is saying we can't move into the next stage until we have that next level of - - -

MR PEARSON: Yeah.

20 MR WILLS: - - - offsets available, so we're talking, really, around stage 1.

MR PEARSON: Yeah.

MR WILLS: And I recognise your point being that there could be a residual risk in

25 stage 1 on the rehab component.

MR PEARSON: Yeah.

MR WILLS: However, we're saying that we've got the confidence in delivering it

30 and we will come back to you and show you what that scarcity - - -

MR PEARSON: Yeah.

MR WILLS: - - - equation looks like.

35 MR PEARSON: Yeah.

MR KRUK: So the reason that's significant is some of us had to go through the

40 documentation, you know, when – without having previous presentations. The importance of that being very clearly put can't be underemphasised, I think.

MR WILLS: The scarcity component - - -

MS KRUK: No, no, what does it affect under - - -

45 MR WILLS: - - - or the - - -

MS KRUK: - - - ..... barriers - - -

MR WILLS: Yes.

5 MS KRUK: - - - and it might be understood ..... lawyers at the moment, but you know, you've articulated it with the detailing also of the transition arrangements. I think that was a very - - -

MR PEARSON: Yeah.

10

MS KRUK: - - - insightful exercise to read the material you have put forward.

MR WILLS: Sure. And just to – you know, you did pick up the point, Tony. The credits that we're talking about that are potentially at risk for mine rehab for CEC amounts to just under 2500 credit, which would equate, on a typical yield of around 14:1 ratio of credits to hectares. We're talking about 175 hectare property - - -

15

MR PEARSON: Yeah.

20 MR WILLS: - - - in or abouts for that. And we've just added a property that was two-hundred and - - -

MS KRUK: Two-hundred-something.

25 MR PEARSON: Yeah – yeah.

MR WILLS: - - - 284 – 264 hectares in size, so - - -

MR PEARSON: Yeah.

30

MR WILLS: And again, we've shown – we haven't been just sitting on our hands. We've been demonstrating - - -

MR PEARSON: Yeah.

35

MR WILLS: - - - and we're progressively acquiring – we're actively looking for properties.

MR PEARSON: Yeah, yeah.

40

MR WILLS: This next slide is really about some policy discussion around what the - - -

MS KRUK: Yeah.

45

MR WILLS: - - - The FBA and etcetera. I'm not going to - - -

MR PEARSON: Yeah. No, no. I think we - - -

MR WILLS: I will leave that as being read.

5 MR PEARSON: Yeah, take that as read.

MR WILLS: And again, I think we've really talked about - - -

MS KRUK: Yes.

10 MR PEARSON: Yeah.

MR WILLS: - - - this stage 2 and 3 point around going - - -

15 MR PEARSON: Yeah.

MR WILLS: - - - through the gate and not being able to do the disturbance - - -

MS KRUK: Yeah.

20 MR WILLS: - - - until the offsets are in place.

MR PEARSON: Yeah, I think – I think the concern there was more around, you know, if you – what we – you know, what we would want – like to try and avoid is a situation where you get to the end of stage 1, you're coming up to stage 2 and you can't – there's no opportunity for rehabilitation offsets for EPBC and you can't find any suitable land-based offsets. So we have a project that's, kind of, halfway through, the project stops and then nothing happens until 2041, at which point, then, the kind of, wind-up process – decommissioning process starts. So it was just trying to get a confidence level around how likely is it that the stage 2 and 3 offsets can be met and the project can then just continue to proceed through the various stages.

25

30

MR WILLS: Yeah. And as I said, we've already got over half of our CEC credits for stages 2 and 3 combined, so - - -

35 MR PEARSON: Yeah.

MR MERRELL: And the unknown there is obviously what the Commonwealth – you know, once the New South Wales process finishes, if it's approved, then the Commonwealth will do their own assessment and their own conditions and we don't know what their conditions may be, their offset – so obviously, from a New South Wales' perspective, in that circumstance, you could just pay into the fund and that - - -

40

45 MR PEARSON: Correct. Yes, yes.

MR MERRELL: - - - addresses New South Wales' requirements. The Commonwealth will – you know, will advise in their conditions what their requirements are in terms of offsets. Now, all these numbers are based around the New South Wales' process. They may have a different assessment view as to what they consider is an adequate offset or not. You know, they may say if the New South Wales offset requirements are satisfied, that's acceptable. Or they might say "Well, we want this offset or we want that".

And I suppose that's some of the unknowns that – of that Commonwealth process that we won't get an answer to that because they won't – you know, it progresses after the New South Wales process. So there's not really a risk of not being able to implement from a New South Wales legislative or policy perspective, because that can be addressed through the fund. I suppose the question mark is if the Commonwealth requires the same level of offsets and they don't, at some point in the future, approve the fund, then there may be a gap there. But it's – it's an – there's a little bit of an unknown there because we don't actually know what their conditions

MR PEARSON: But why is it unknown, though? The current regime, I thought, was actually quite clear, which was that there is not - - -

MR MERRELL: Yes.

MR PEARSON: There is one less pathway under the federal regime to offsetting

MR MERRELL: Yes, but they - - -

MR PEARSON: - - - and so - - -

MR MERRELL: They also – they haven't conditioned what their offset requirements are, so they may say "We want the same offset as what New South Wales' requirements are" or they may require a different type of offset. Now, we don't have any information that says that's what they will do, but their – the ultimate decision and conditioning by the Commonwealth will be done by the Commonwealth and it may be exactly the same as the New South Wales' conditions or it may be different. And I suppose that's part of my question or comment is there isn't the risk – the measures under legislation and policy to manage the risk from a New South Wales process are all in place. So the – I think the risk that the Commission is asking about relates to the Commonwealth conditions and, at the moment, we don't know what the Commonwealth's conditions may or may not be and it's – I don't know if there's any opportunity to separate those risks, I suppose.

DR WILLIAMS: Does that include ..... difference offset ratios as well?

MR MERRELL: Well, we don't – I mean, they're - - -

MR WILLS: We expect not, because the bilateral assessment is - - -

DR WILLIAMS: Would – yeah.

5 MR PEARSON: Yeah.

MR MERRELL: The bilateral relates to the assessment process, but they will make their own - - -

10 DR WILLIAMS: Yeah.

MR MERRELL: - - - determination and reserve the right to impose their own conditions.

15 DR WILLIAMS: Yeah.

MR PEARSON: Yeah. No, I understand that. Okay.

MR WALLS: Or – and it’s Tim Wall. Or, in effect, like what you were saying,

20 Tony, what compliance action they may take in 30 years’ time, should something not conform to - - -

MR PEARSON: Yeah.

25 MR WALLS: - - - where they would like it.

MR PEARSON: Yeah, yeah.

MR WILLS: Still in the biodiversity space, we had – there was further questions

30 around – we put forward the body of work on the rehab activities across Glencore particularly. There was a question around have we had any of those sites independently verified or successfully used as an offset? I guess we have had two sites in Queensland, Newlands and Rolleston in recent years, ’17 and ’18, which have had certification from the Queensland Government at – at meeting criteria.

35 And in late 2018, we put a submission in for our Westside Mine, which is in Lake Macquarie LGA, for 38 hectares of site to be certified as meeting completion criteria. So they’re only small pockets, but we have extensive - - -

MR .....: ..... record.

40 MR PEARSON: Could I ask that question the other way around: have you ever had a rehabilitation site not accredited? So have you ever applied, as you have with Westside Mine, for certification as meeting the completion criteria and had that - - -

45 MR WILLS: Knocked back?

MR PEARSON: Yeah, that certification rejected.

MR WILLIS: I'm not aware of that. I guess it's one of those things where you wouldn't put forward a resume with a reference that you would be unhappy with their response. So I'm not sure we would put forward a rehab site for certification if we didn't think it met the criteria.

5 MR PEARSON: Yeah. I understand that. But - - -

MR WILLIS: Well, so the answer that I - - -

10 MR PEARSON: Is no.

MR WILLIS: - - - am currently aware of and Tim's our - - -

MR WALLS: Yeah, we would have to come back in.

15 MR WILLIS: - - - in our approval space across the group – our expert in that area is not here today, but we can come back formally - - -

MR PEARSON: Okay. Yeah.

20 MR WILLIS: - - - to say from a Glencore perspective - - -

MR PEARSON: Yeah.

25 MR WILLIS: - - - and we may do the same thing within Peabody, but certainly no is the answer that comes to mind.

MR PEARSON: Yes. Okay.

30 MR WILLIS: Aislinn?

MS FARNON: Yes. This is more along the lines of the discussion we were having about what work we were undertaking in improving our rehabilitation. So we're currently participating in the ACARP project of establishing self-sustaining

35 ecological mine rehab that achieves recognised ecological communities. And that's just to – you know, to further demonstrate that mine rehab can support recognisable and self-sustaining ecological communities that meet the conservation advice, particularly for the CEC, which is obviously the issue of the day, when it comes to biodiversity.

40

As written there, the project also aims to provide the mining industry with more guidance of how to improve ecological rehab and then also improving our monitoring techniques and our way of reporting that and building on a lot of the work that has already been undertaken at Mount Owen, of which has been a lot of

45 work undertaken with the University of Newcastle over the years. So it's building on that work but moving into particularly looking at what the requirements are for the CEC itself. And hopefully we will get some – all the findings from that project we

will put into practice on our site and I'm sure on any other site that we have those requirements upon us, so - - -

MR PEARSON: Good. Thank you.

5

MR WILLS: Moving onto the voids. And the question that was posed to us last time around is what's the most desirable environmental outcome in relation to the Wambo void, setting aside the economics associated with it and any other considerations there may be. In our view, it is – the most desirable environmental outcome for the Wambo void is to mitigate groundwater seepage from the void and continue to have it act as a long-term groundwater sink and manage the groundwater level, so it does not report to the North Wambo Creek alluvium.

10

So we've done a lot of work since our meeting back in December around groundwater modelling. And I guess there was a comment that was made, Tony, where you had read in the document that if by filling in the Wambo void that groundwater would only report to the United void and not report anywhere else. And I guess we will talk about that, in the sense that it does report to the United void, but it does report elsewhere and it does report, more importantly, to the North Wambo Creek alluvium. And we will show you what that looks like.

15

20

MR PEARSON: Okay.

MR WILLS: So, again, our proposal of having the Wambo void specifically as an open void and acting as a groundwater sink it supported by – we have an argument from an economics perspective and we have an argument from an environmental outcome perspective. It's a bit hard to see the figure in the right-hand side, but what we're trying to demonstrate here is the excavated areas within the Wambo void lease are. So this is the depth of mining, so orientation-wise it's slightly twisted to the north more. So you've got the united void here on the right-hand side, the mined-out area and you've got the Wambo void with the dropdown as part of the project application. And then these areas here are also the mined-out areas that are already pre-existing from Wambo's historical mining activities.

25

30

And what we're trying to demonstrate here is that it's not just the void that has the – that takes the groundwater level, it's also saturation through the spoil. And that connectivity from that void is not just to the United void, it connects all the way down and into the North Wambo Creek alluvium down here. And we will go through that in a moment. But ultimately what happens is groundwater will recharge in this area, gets to roughly the level of RL85 and then it essentially spills in three directions: (1) to a lesser extent to United; (2) to a letter extent to the Hunter Valley void across the road; and (3) to the most significant extent, reports to the alluvium in the North Wambo Creek. Where are we? It's jumping around on me. So this is to show the lines associated with three different scenarios.

35

40

45

So the blue line is where we have both voids' water level recovering to. The black line is the natural surface and that's the natural surface that is RL85 at the North

Wambo Creek alluvium area, which connects down in that bottom southern-western corner on that slide I showed you previously. The red line is if we fill the Wambo void but leave the United void open. And you can see here the water will recover above natural surface of the – at the North Wambo Creek and will then report to the North Wambo Creek. The yellow line is also filling in both voids. And it just essentially – and this is the effect on the North Wambo Creek, it takes longer to recharge itself to the point, because we’re filling in the United void as well, and gets to the similar outcome and does report to the North Wambo Creek ultimately as well, whereas the blue line is the recovery level when the voids are open and operating as saline groundwater sinks.

MR PEARSON: Sinks, right. And so it draws water - - -

MR WILLS: So the evaporative effect - - -

MR PEARSON: - - - and then evaporates.

MR WILLS: The evaporative effect is operating in this regard.

MR PEARSON: Yes. Okay.

MR WILLS: In the filling in of the voids, the evaporative effect is not working, so it’s now allowing that groundwater level of recharge and continue to rise. And then that extent that I was demonstrating here is it reaches to a point – and if we can assume, say, a bathtub filling all the way over and it doesn’t just spill in – it’s spilling in different directions, but one spills quicker than the other. And we’re all talking about regional levels in the order of roughly RL85 here to United, but there’s some permeability-related issues there, but we’re now moving through the spoil, because there are some hard barriers through this connection here. But we’re talking about old spoil coming back in this area here, so it’s moving to the North Wambo Creek.

MR PEARSON: Yes.

MR WILLS: This is showing a cross section – and this is the cross section here, which is – this is the natural topography line, which is incorporating the ex-pit dump for the project. So this point here is roughly in the middle there and this batter down and that there is the location of the creek, which is just in that region there. So you can see there that’s the surface that is – so RL85 is the surface. This is obviously the sub-surface alluvium impact. But you can see there the green line is filling in both – leaving both voids open, operating as the groundwater sinks. The other lines are when we’re filling in either Montrose only or Wambo only and also filling in both United and Wambo. So it does have an environmental impact, where the groundwater level does recover and essentially reports to North Wambo Creek. So I guess that - - -

MR PEARSON: Is there more information behind this, in terms of the assumptions you’ve used, and some sensitivities around those assumptions, and - - -

MR WILLS: We've got the groundwater modelling.

MR MERRELL: It's done using the same model as the other work.

5 MR PEARSON: Yes.

MR MERRELL: But I mean, yes, there's more work done behind it, so - - -

MR PEARSON: Is there a way to just package that up in something neat that we  
10 can look at, that - - -

MR WILLS: In terms of a report?

MR PEARSON: Yes, or just – I mean, it doesn't have to be long, but just something  
15 that kind of elaborates a little bit more on some of the underlying work that feeds  
into these outputs.

MR WILLS: Sure.

20 MR MERRELL: Sure.

MR PEARSON: Yes.

MR PEARSON: Also in a way, I think, you would be happy for it to be, obviously,  
25 put up on our website.

MR WILLS: Yes. We can – we take that on notice.

MR PEARSON: Yes.

30 MR WILLS: And we will get that sent back to you.

MR PEARSON: That would be great. Thank you.

35 MR WILLS: Okay. So, this is that illustration of the bath tub effect, and where the  
flows are directing, and the – so, the – the one at the top is both voids operating as  
groundwater sinks, and so you can see there that the predominant flows from the  
spoils are back towards the voids.

40 MR PEARSON: Yes.

MR WILLS: With Wambo open, you can now see that it gets to a point where starts  
to discharge to the alluvium and into the spoil, and also - - -

45 MR .....: ..... that is.

MR WILLS: Wambo closed, sorry.

MR .....: Wambo closed.

MR WILLS: What did I say?

5 MR PEARSON: Wambo closes. Yes. Backfill. Yes.

MR WILLS: Wambo closed, I mean, so Wambo void filled in. United void still open.

10 MR PEARSON: Yes.

MR WILLS: So you can see there the transfer. And the bigger the line, the greater the flow. And then the other one below here is both voids filled in. And you can see there the flows. And this is the connectivity, both to the Wollombi Brook directly,  
15 but also to the North Wambo Creek.

MR PEARSON: Yes. Okay.

MR WILLS: That's right.

20 MR PEARSON: That's very useful.

MR WILLS: There was the work around – the question around how do we get from \$450 million in the first iteration to 777.

25 MR PEARSON: Just seemed like every time we asked, the number got bigger.

MS KRUK: ..... variants ..... variants.

30 MR WILLS: And I guess the history there was a very simplistic approach, back in the first question in the response to submissions, was – we took a life of mine average number which was reflective of both ex-pit dumping, in terms of mining activities, so the truck fleet requirements are averaged across the life of the mine, so it includes the ex-pit workload. We're using more trucks, and then, when you're at  
35 steady state, and you're dumping back in pit, you're using less trucks. So that's reflective of that long-term average, which was the \$3 per BCM. In the second round – and that was – so the one thing that's constant is the 150 million cubes. That hasn't changed; it's just the cost per the material movement.

40 In the second round, where we got to the 630, we went through and looked at the detail around – “Okay, well this is not a life of mine truck haul; this is a hire truck usage” – and we got to the \$4.20 per BCM, and we then also considered the fact that we needed to re-establish rehabilitation, so there was some more work to be done around the shaping of the dump. We were winning the material as well as the  
45 rehabilitation activities on the area that we're restating.

So that's how we got to the 630. And then, to get to the 777 – so the – the material is still the same, so it's still 150 million cubes. We did a lot more detailed mine planning, but, incidentally, it came out at, still, around the \$4.20. I think it was \$4.22 per BCM – the mining cost associated with the truck and the excavator activities –  
5 but importantly we added the additional six years of – because we were extending the life of the project by six years, we then had to maintain the overheads to manage the operation, so - - -

10 MR PEARSON: Right.

MR WILLS: - - - it was the addition of having the additional insurance, the additional people – from a staffing point of view and a supervision perspective. It's all those other things that carry on - - -

15 MR PEARSON: Yes.

MR WILLS: - - - to allow the site to carry on that we then added to the project in the final assessment - - -

20 MR PEARSON: Yes.

MR WILLS: - - - for the \$777 million.

25 MR PEARSON: And presumably that would delay the return of your bond.

MR WILLS: Yes.

MR PEARSON: Right. And does that include any costs associated with - - -

30 MR WILLS: We haven't costed that bond in here.

MR PEARSON: Okay.

35 MR WILLS: We could have another go, and interest. .... - - -

MR PEARSON: No, no, no, no. Please. I think three's good enough.

40 MR WILLS: Yes. So that's really – and it wasn't a goal-seeking exercise; it was actually taking a more granular assessment each time round. And the first response was a very high-level, "Here's our offer – mine average, truck and shovel costs – \$3 – bang, that's the number."

MR PEARSON: Yes. We mind find the fourth go goes down.

45 MR WILLS: I don't think so, Tony.

DR WILLIAMS: Gary, would that also delay the ecological mine rehabilitation, as well – the timetable?

5 MR WILLS: Well, it would, but more importantly it would disturb some of those areas that we had planned to rehabilitate.

DR WILLIAMS: Okay. Yes.

10 MR WILLS: So, we wouldn't go and rehabilitate them to the ecological ..... level that we were achieving if we knew they were going to be re-disturbed in the future.

DR WILLIAMS: Yes.

15 MR WILLS: We would only temporarily rehabilitate them, to manage dust and the like, but we would not be establishing those communities.

MR PEARSON: So the disturbed area – just picking up on that point, actually – the disturbed area – is that area the area that is subject to the longest period of rehabilitation? So is that the stuff that kind of - - -

20 MR WILLS: Yes.

MR PEARSON: - - - is being rehabbed way back on - - -

25 MR WILLS: Yes.

MR PEARSON: - - - you know, 2020, or something?

MR WILLS: Yes.

30 MR PEARSON: Okay.

MR WILLS: It will be the material closest to the pit. So, we've gone and done an optimised plan, where we look at winning the material at the lowest cost – so the closest material to the void – but the cost comes from the fact you're taking it from, potentially, an RL of 195 down to an RL of 40, I think it is, in the pit bottom. So, it's a long haul. You can't just back the truck up to the edge of the dump and just tip it over; you've got to – from a safety and an environmental perspective, you've got to drive it down to the bottom and start building your dumps up.

40 MR PEARSON: Okay.

MR WILLS: So - - -

45 MR PEARSON: So it's essentially the rehab that has got the highest ecological value that you would be disturbing.

MR WILLS: That we would be disturbing, yes.

MR PEARSON: Yes. Okay. I understand.

5 MR WILLS: Well, the longest established.

MR PEARSON: Yes. Okay. Sorry. Yes. yes.

10 MR WILLS: Because it's the – it's part – well, it's – if you look at it from that ex-pit dump, that will be complete year 6.

MR PEARSON: Yes.

15 MR WILLS: The majority of it will – all of that will be at a rehabilitation implementation phase at the end of year 7/year 7. Some of those lower slopes of that dump will have already been rehabilitated progressively, and it's just as we get to the top. And so - - -

20 MR PEARSON: Yes.

MR WILLS: So yes, there is the effect of disturbing already rehabilitated areas to then go and rehabilitate this 111 hectares across both sites.

25 MR PEARSON: I think there was one other - - -

MR WILLS: There was another question, sorry - - -

MR PEARSON: Yes.

30 MR WILLS: - - - which the slide is hidden, and that was a breakdown – further information in relation to the impact on the financial liability of the project of filling the Wambo Void. I guess in response to that, it's not just an economic consequence. It's the environmental consequence that we've demonstrated in the earlier slides, but I still maintain the position that it is uneconomic for us to fill the void in, recognise

35 it's the lesser of the two numbers, the \$176 million for the Wambo Void and \$600 million for United. The net present value of that \$176 million at seven per cent is in the order of \$30 million.

40 MR PEARSON: Yes, that's right.

MR WILLS: Our net surplus for the project was in the order of \$270 million. So we're talking about a material element of our net surplus - - -

45 MR PEARSON: Yes.

MR WILLS: - - - being consumed - - -

MR PEARSON: What do you mean by - - -

MR WILLS: - - - by this rehabilitation activity.

5 MR PEARSON: What do you mean by “net surplus”?

MR WILLS: Well, the net benefit for - - -

MR PEARSON: The NPV of the project.

10 MR WILLS: The NPV for the investment decision - - -

MR PEARSON: Okay.

15 MR WILLS: - - - of two hundred and seventy – \$268 million.

MR PEARSON: Yes, okay.

MR WILLS: So we’re talking, you know, 10 per cent of the project would be – over

20 10 per cent of the – it’s a material number.

MR PEARSON: Yes.

MR WILLS: So it’s still uneconomic - - -

25 MR PEARSON: Yes, okay.

MR WILLS: - - - in regards, not to mention the environmental cost of the

30 groundwater recharging and going offsite.

MR PEARSON: Yes.

DR WILLIAMS: Now that’s just the United Void or - - -

35 MR WILLS: That’s the Wambo Void.

DR WILLIAMS: The Wambo.

MR WILLS: That’s the smaller of the two.

40 DR WILLIAMS: Yes. Yes. Sorry. The Wambo Void.

MR WILLS: Yes.

45 DR WILLIAMS: Yes.

MR WALLS: It's Tim Walls. Which is again similar to that sort of \$7 million per hectare - - -

MR WILLS: Correct. So - - -

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MR WALLS: - - - sort of scheme.

MR PEARSON: So I think there was a – there's a precedent of – I think it was the Wilpinjong project, which is a Peabody project, as I understand it, where backfilling was actually required as part of the project. Did that have the same environmental – are there parallels here? Is it – did that have the same environmental sort of - - -

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MR ALEXANDER: No.

MR PEARSON: - - - impacts and issues that we're seeing here, or is it - - -

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MR ALEXANDER: Yes. A different circumstance given, sort of, where the – with the geology and the final landform, we ended up out there – we were able to get one of the final voids to actually blend in with the final landscape - - -

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MR PEARSON: Right.

MR ALEXANDER: - - - and bring it up into a hill and that was effectively just because the topography allowed us to do that.

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MR PEARSON: Okay.

MR ALEXANDER: We still ended up with the other voids but that void in pit 8 – we were able to sort of bring down the ..... so it was a spilling - - -

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MR PEARSON: Yes. Okay.

MR ALEXANDER: It was a spilling area.

MR PEARSON: Okay.

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MR WILLS: And again, we are talking about two approved voids – still maintaining two voids – but importantly, we've got two separate mining locations and we went through that back in the previous presentation in February 2018 where we talked about the different horizons and the ability to be able to join them because the economics aren't there to do so.

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MR PEARSON: Yes. That's right.

MR WILLS: So that are two distinct, separate mining areas.

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MR PEARSON: Yes.

MR WILLS: It's not the mega-pit that's being potentially portrayed through the media at times.

MR PEARSON: Yes.

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MR WILLS: They are two separate mining areas and these – each mining area has its own final void, so - - -

MR PEARSON: Yes. I think that was – with the review project, that was quite a useful exercise for us, actually, to get that site context. I'm sure it's on the agenda for this site trip, but to get that understanding of how the layout limits the ability to bring together to the two pits was quite useful.

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MR WILLS: Yes. Yes.

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MR PEARSON: Yes.

MR WILLS: So moving on to the final question, which was the sunset clause, and look, I guess there is a sunset clause associated with the joint venture. It is linked to a timeframe that, should the approvals not be granted, the joint venture would be possibly terminated unless extended by agreement by the joint venture participants. That sunset clause is, ideally, commercially sensitive information, however I can make the comment – and Micheal will support me here – is the sense that the other overriding factor is that delays to this project means that the existing Wambo open cuts current consent expires in December 2020.

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25

MR PEARSON: Yes.

MR WILLS: There's still – there's an effect and there is a need to have a decision made on this project to allow either a modification to go in or to – there is a sunset clause, which means the joint venture would dissolve.

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MR PEARSON: Yes.

MR WILLS: Possibly dissolve.

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MR PEARSON: Okay.

MR ALEXANDER: Yes. So, you know, Wambo is a difficult position at the moment, given the timing, that - - -

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MR PEARSON: Yes.

MR ALEXANDER: - - - you know, we've got a fair lead time in a modification that's required for the end of 2020 to keep the mine going because we haven't finished mining those reserves that are under the existing consent.

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MR PEARSON: So what – I mean, what contingencies – so that’s obviously one of the risks around a delay but if there are other delays for other reasons, what are the other sort of big risks and mitigation strategies that you’ve got?

5 MR WILLS: It’s not a trigger. The sunset clause is not an absolute trigger that, as soon as you reach that point, it’s gone.

MR PEARSON: Yes.

10 MR WILLS: It’s by – we can extend by agreement for the two joint venture participants.

MR PEARSON: Right. I mean, I’m happy to redact if the commissioners feel like that date is relevant and ask that question - - -

15

MS KRUK: The 2020 - - -

MR PEARSON: No. No. The sunset clause date for the DV but I’m also happy not to ask that question.

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MS KRUK: Well, put that to the company.

MR WILLS: We’re prepared to provide you the information, provided it’s redacted from the transcript.

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MR PEARSON: Redacted. Okay. We’re happy to redact.

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**CONTINUED FROM TRANSCRIPT-IN-CONFIDENCE**

5 MR PEARSON: Okay. Well, that's helpful from my perspective. I'm just checking through, very quickly now, whether there are any other outstanding issues that I've got and maybe if you've got any other questions - - -

10 MS KRUK: No. I mean, you would understand, obviously, after a public meeting tomorrow - - -

MR WILLS: Thursday.

MS KRUK: No. Thursday. There may be some other issues that arise, so - - -

15 MR WILLS: Sure.

MS KRUK: But can I, as obviously a commissioner that has taken this process on later on, thank you for the detail with which you've provided following both the review and the earlier session with the commissioners.

20 MR WILLS: Thank you, Robyn.

MS KRUK: Very useful.

25 DR WILLIAMS: Yes. Thanks for updating everything from the 6 December meeting.

MR WILLS: Yes.

30 DR WILLIAMS: That has been really helpful.

MR WILLS: Yes. Pleasure.

35 MR PEARSON: Yes. I've got nothing further and I would like to add my appreciation. The questions that came out of the last session – that was quite a little bit of work on your part and the detail with which you've come back is certainly very helpful for us, so thank you very much.

40 MR WILLS: All right.

MR PEARSON: I might draw the meeting to a close there.

**RECORDING CONCLUDED**

**[12.57 pm]**