

Project	Hydro Kurri Kurri Site Redevelopment Project	From	Emily Strauss
Subject	Community Reference Group Meeting	Tel	1800 066 243
Venue/Date/Time	Thursday 18 May 2023 MS Teams video conference 6.05pm – 7.08pm	Job No	2218982
Copies to	All committee members		
Attendees	<p>Mr Toby Thomas – Community representative, Towns with Heart (TT)</p> <p>Mrs Kerry Hallett – Hunter BEC (KH)</p> <p>Mr Andrew Walker – Hydro Kurri Kurri Project Manager (AW)</p> <p>Ms Emily Strauss – Minutes, GHD (ES)</p> <p>Mr Michael Ulph – CRG Chair, GHD (MU)</p> <p>Mr Richard Brown – Managing Director, Hydro Kurri Kurri (RB)</p> <p>Cr Robert Aitchison – Maitland City Council (RA)</p> <p>Clr Rosa Grine – Cessnock City Council (RG)</p> <p>Clr Mitchell Hill – Cessnock City Council (MH)</p> <p>Ms Jenny Mewing – Cessnock City Council (JM)</p>		
Guests/observers			
Apologies	<p>Mr Alan Gray – Community representative - Retired Mineworkers</p> <p>Mr Bill Metcalfe – Community representative</p>		
Not present	Mr Darrin Gray – Community representative		



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## Notes

### 1 Welcome and Acknowledgement of Country

Meeting commenced at 6.05pm

**Michael Ulph (Chair) (MU)**

Acknowledgement of country.

Emily Strauss from GHD taking minutes.

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**2 Meeting agenda**

## Agenda

1. ECC Construction & Site Remediation Update (AW/RB)
2. CRG Q&A – CRG Members
3. General business





**3 Welcome and meeting opening**

MU welcomed attendees, provided an Acknowledgement of Country and noted apologies.  
MU asked those present to declare any pecuniary interests.

**4 Last meeting minutes**

KH moved the minutes.  
RA seconded the minutes.

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## 5 Project Update

AW: I'll start off and then Richard will continue.

So, as usual, this is just a number of photographs. So, the project update: the main areas that we've been working on, sorry, that should say the last three months, not two months. The west surge pond sediments, which were stored in two SPL sheds which had been emptied; the 68C demolition waste storage area; the wrapped asbestos storage area; the asbestos contaminated concrete stockpile; the two bake furnace tubs which contain process waste like coke and alumina and cryolite; the 60C contaminated soil stockpile; the Dickson Road North stockpile, which had a lot of asbestos; contaminated soils from houses in the buffer zone that had been demolished in the past, as well as Hart Road Municipal Landfill was all stockpiled there; the anode butt fines stockpile and the refractory brick stockpile and we have also started removing waste from the capped waste stockpile. We started that on the 4th of May, so we've been going for two weeks now.

So we'll go through that now.

Just a recap on the last meeting. So that was a view of the cell in early February before waste started going in.

The next slide shows the start of the waste - that's actually that material from the western surge pond, which had some small amounts of PFAS in it and we were storing that in two SPL sheds. So that went into the first quadrant, the southeast quadrant, and we call it the fluffy layer. So the first 1.5 metres on the floor and against the batters has to be a soil that's free of any sharp objects like pieces of steel or wood or glass or things like that. It was good that we had that material - basically just soil and sediments and that worked well.

This next slide just shows they started off just by backing the moxies down the south-eastern ramp, tipping off at the bottom, and then when the truck left, the dozer would drive in and spread it. And then when there was enough material, the dozer could actually stay there while the truck tipped and gradually pushing out, making it a larger and larger area, and eventually trucks are able to back right out.

### Project Update – Cell Construction

The main focus areas for the last two months has been the remediation of the following areas:-

- West surge pond sediments from SPL sheds 6 and 8 to the ECC
- 68C demo waste storage area
- 7A/B wrapped asbestos storage area
- Asbestos contaminated concrete stockpile
- 7A bake furnace tubs – process waste
- 60C Contaminated Soil Stockpile and footprint
- Dickson Road North Stockpile and footprint
- Anode butt fines stockpile
- Refractory brick stockpile
- Start of mixed smelter waste from the Capped Waste Stockpile on 4/5/23

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### Project Update – Cell Construction



Aerial view of the cell – 6/2/22. Cell complete and ready to receive waste. This has now started in the SE quadrant as @ 13/2/23.

### Waste Transfer



Start of waste transfer to the SE quadrant on Mon 13/2/23. This was the cement-stabilised pond sediments from the west surge pond. An initial pad of 'fluffy' layer material was placed at 1.7m thick using a 36T digger.

### Waste Transfer



The dump trucks could then back out onto the pad and tip close to the edge where the dozer could spread the material. The dozer has GPS and is targeting a 1.7m thick layer that can be compacted and trimmed to 1.5m thick.

This is a couple of weeks later looking at it on the 1st of March. The south-eastern quadrant's almost finished with fluffy layer on the floor and some of it up the batters.

MU: Andrew, how deep is that fluffy layer going to be?

AW: 1.5 metres.

MU: 1.5 metres. And what's the height of those dividers in the middle for want of a better word.

AW: The bunds, they're 1.5 metres. But you'll notice that they kept a gap to the bund separating the southeast from the southwest. And that was just so that if we had rain, we wouldn't get contaminated water spilling over into the adjacent quadrant because the filling plan was to fill the two eastern quadrants first and leave the western quadrants empty for as long as possible. And any rain that falls in the Western quadrants, we could just pump that out and put it into the sediment basins and that will minimize leachate generation by filling one quadrant at a time.

Next slide. This is just looking at it from a different perspective. You can see how thick that layer is and at about this time they also had a compactor brought to site, a landfill compactor. Which was used to compact the material to make it easier to traffic on for the trucks. We have a specification in the contract that Daracon has to meet, which is a density of a minimum of 1.6 tonnes per cubic metre, and that's why they have to use a compactor.

This shows the cell a bit later on, so now we're at 12th of April. You can see the two easternmost quadrants. They finished the fluffy and they started putting waste in and the waste is coming in via the south-eastern ramp, which is at the bottom of the slide, and the fluffy, they've started going into the north-western quadrant using the north-eastern ramp for tipping off, and the dozer was pushing it out to the northwest. Before we could use that quadrant - in the very northern part of the cell, we had to remove the cap from the leachate pipe in the north-western quadrant and slide a sleeve across to connect the pipe work up through what we call a saddleback, which is like a gap in that dividing bund. And there was also a rain flap there, which was used to isolate the NW quadrant from the NE quadrant. We removed the rain flap and so at this point we actually have three quadrants with waste in them and all three quadrants producing leachate. The only one that wouldn't be producing leachate at this point is the south-western quadrant. The one closest to us on the left-hand side that was still capped off so any rain that falls in there is pumped out into the stormwater.

### Project Update – Cell Construction



PR: Aerial view of the cell – fluffy layer material (West Surge Pond  
FU: Sediments) in the SE quadrant as @ 1/3/23.

### Project Update – Cell Construction



PR: Aerial view of the cell – fluffy layer material from the western surge  
FU: pond going into the SE quadrant. 40T dump truck and D6 dozer working on 2/3/23.

### Project Update – Cell Construction



Aerial view of the cell as @ 12/4/23 - note that the SE and NE quadrants are being filled with waste and fluffy layer waste material has started to go into the NW quadrant. Leachate pipes connected and rain flap removed on the north saddleback.

Next slide. Yeah, that's just looking at the same thing from a different angle.

Next slide. And again, looking at it from a different perspective, you can see the leachate pond, which is the closest pond to us. So Daracon have to manage the water level in the sumps and transfer leachate into that pond and from there it gets pumped to another pond next to the water treatment plant. I'll talk a bit more about that later. So they are managing all of that for us and so far they're staying on top of that. But obviously as more quadrants fill up with waste and we start chewing into the capped waste stockpile, if we get rain, we generate more and more leachate. So we're keeping a close eye on that.

NB: Toby Thomas joined the meeting at 6:09pm. Rosa Grine joined the meeting at 6:12pm.

Welcome, Rosa. Welcome, Toby. Thanks Andrew.

AW: And then this slide shows the removal of the demolition waste.

TT: Can I just interrupt? I just can't see any of the slides.

MU: Hmm, that's more than likely at your end I'd say Toby.

TT: I'm just wondering what I need to do.

KH: I can see them.

TT: No, we appreciate that. Anyway, I'll fiddle around here. I can see all the people here, but no slides. Okay, keep going.

AW: This slide shows the demolition waste being removed from building 68C, which was the old anode storage building. So this is all the non-recyclable waste from the demolition. So things like alsynite sheeting, some wood and plastic, that sort of thing. So using a grab, removing it, putting it into a dump truck.

Daracon were then driving from it there to another stockpile nearby and putting soil on top from the 60C stockpile just to weigh it down so that the alsynite didn't blow out. It's very light. We didn't want it blowing around the site. This is a few weeks later. They're now about halfway through that demolition waste. You'll note there's a lot of water there, so they we're backing the water cart in and spraying the waste and saturating it because there was a lot

### Project Update – Cell Construction



Aerial view of the cell – 12/4/23. Note that fluffy layer material has been pushed over the bund from the NE to NW quadrants.

### Project Update – Cell Construction



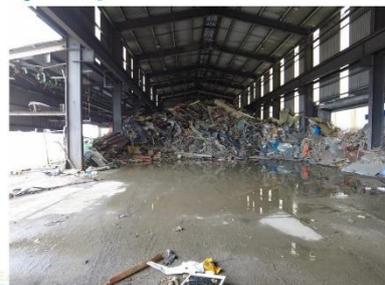
Aerial view of the cell – 12/4/23.

### Project Update – Cell Construction



Removing demolition waste from 68C rubbish shed on 6/3/23. 20T excavator with grabs being used to load a 40T dump truck.

### Project Update – Cell Construction



68C rubbish - shed half empty as @ 24/3/23. Note that the waste was kept wet to suppress the dust.

of fine dust on it, and also at this point, instead of using the digger with the grabs, they were using a loader to load it out.

Next slide. And this is that building a couple of weeks ago, it was finished and the floor was all swept clean by Daracon and it was validated by Ramboll and the site auditor as well, I might add. So that's now been handed over to CMA Contracting for demolition. We actually handed that building over today officially.

Next slide. This next area is what we call the 7A/B wrapped asbestos storage area. This is both bonded and friable asbestos. There was a lot of asbestos in pot line one. There were round pipes, insulators, there were gaskets that were made of friable asbestos. There were flanges in ductwork, like in green mix that had asbestos gaskets and CMA cut both sides of the flanges, and then they were put into an IBC which are the blue containers and fully sealed. So a lot of these packages of asbestos were on pallets.

So they were loaded into just six wheeler trucks - bogey tippers. In this case, in this first photo, there were some long pipes that wouldn't fit in the six wheelers so they put it in a dump truck. But most of it was in six wheelers.



Next slide - so that shows that area was finished, but there was some dust on the floor so it needed to be vacuumed just in case.

We did analyse some of the dust and we were worried about asbestos so we got Daracon to vacuum the whole thing. So you can see that's what's happening here using a HEPA filter vacuum. A couple of asbestos workers vacuumed the whole floor and then we also did testing for asbestos fibres.



And this shows the finished product. So the floor was very clean at the end of that. That's just the bag of the vacuum cleaner. All the bagged waste went to the cell and that's also now being passed by Ramboll and AECOM, our site auditor and that's also been handed over to CMA as of today.

### Project Update – Cell Construction



7A/B wrapped asbestos storage area after cleaning on Saturday 13/5/23.

Next slide, another area was at the other end of that same building. The 7A furnace, you might remember that the two tubs were being used to store what we call process waste. So alumina, cryolite, pot room scrubber bags, carbon plant materials like coke, pitch, anode butts, scrubber bags from the green mix scrubber and the bake furnace scrubber. Things that we didn't want stored outside that could blow around the site. We wanted it stored in a building away from the weather. So Daracon are loading it out there.

### Project Update – Cell Construction



Process waste being removed from 7A south tub as @ 30/3/23.

This is a bit later on the 28th of April, we did have some issues with water as you'll see there, this is looking at the south tub, the building has dilapidated. The roof is not in great shape. The guttering - there are like internal gutters on either side of the ventilator that have corroded and rainwater was getting in and also groundwater was getting into the tub. There's a drainage system underneath the tubs that goes to a sump and we were checking the fluoride level and it started off low like at 5 milligrams per litre. But as we started drawing the water out with a pump, it started going up and it got up to between 40 and 50 milligrams per litre and we put that water through the water treatment plant, which was a good precursor to starting the capped waste stockpile because we knew the fluoride would go up when we started treating the leachate from the capped waste stockpile. So it was a good way to test the water treatment plant. Now that the waste has been removed, because we removed the source of the contamination, the fluoride is dropping and it's down to about 20. We're still treating it and will continue to treat it until it drops down below 15, which is the criteria for the water treatment plant. Once it's below 15 milligrams per litre, we can just discharge the water into the stormwater system, which then goes to our surge pond and our north dam and goes to our irrigation area.

### Project Update – Cell Construction



Process waste removal from 7A south tub as @ 28/4/23. Note water level in tub from rain water and ground water ingress. This water was around 40mg/L of fluoride and is treated at the TWTP. Waste has been removed & it has dropped to ~20mg/L of fluoride.

MU: Sorry, did you say how you're treating it? I might have missed that.

AW: I'll show you in a minute. I've got a slide on the water treatment plant coming up.

MU: Thank you.

AW: That's the south tub as of about a week ago. It's finished and empty.



Next slide is the north tub showing it's completely empty and that's been passed by Ramboll and AECOM, and that's now handed also over to CMA for demolition.

This next slide is the 60C contaminated soil stockpile, so this used to be the baked furnace scrubber. We knew this area was contaminated and we stored contaminated soil on top of contaminated ground, so the soils were from areas such as the carbon plant where we had some issues with hydraulic oil that had leaked into the ground and heavy fuel oil and another oil called HTM oil from the green mix and some black slag from potline 3 which had been imported from Pasminco smelter back when they built pot line 3 in the mid-80s and the sediments from the east surge pond that was remediated by Daracon over a year ago was also put on that stockpile. And this was all good, fluffy layer material, so a lot of that went into the northeast and northwest quadrants. That's also now finished, but we dug down about a metre and a half in some places below ground level, but we're waiting on the test results to come back. And it may need more digging yet. We will give you an update at the next meeting.

Next slide. This is the Dickson Road north stockpile area and that's now also finished. A lot of that was used as fluffy layer material. Probably about 50% fluffy layer and 50% waste. So it was good that we filled that south-eastern quadrant first with the material from the western surge pond because we had the option then of taking Dickson Road north material either to the north east as fluffy or the southeast as waste, and we did find some areas that had a lot of concrete or bricks and we didn't want to use that as fluffy, so we put that in as waste. So that's now finished as well. We removed over 60,000 tonnes from this area and it wasn't our waste, it wasn't smelter waste. Like I said before, a lot of it came



from Hart Road Municipal Landfill, which was a landfill that operated back in the 30s and 40s. And then the rest of it was from buffer zone properties that we purchased as part of Line 3 expansion, and that was a lot of buried waste and fully demolished houses with asbestos that was just lying on the ground. So we had to clean all that up and that's all gone into our cell.

This slide shows someone from Ramboll doing grid-based sampling of that whole area and it was 16 samples and they all came back free of asbestos. So that's now been validated and signed off.

We're now moving into the capped waste stockpile. So before the capped waste stockpile started, I think I showed you a few months ago, a simulation that we did and one of the things we identified there was that it was a good idea to wet down the waste and the gypsum just to stop any dusty material coming off the trucks as they travel around the site. So Daracon put in this water spray system. And so every truck after it gets loaded with gypsum drives through these water sprays just to wet it down so that it doesn't give off any dust. We tested that on this day here and then they started removing the rest of the impacted cap shortly after that.

RB: Sorry Andrew, I might just jump in there and just add that any water that you can see there sort of on the ground gets collected into a little dam that's off camera and that gets sent to the water treatment plan as well for processing.

MU: Can I just check in with Toby? Toby can you see okay? Can you see the screen now? Sounds like a no.

AW: The next slide shows the start of removing the rest of the cap on the capped waste stockpile. So you might remember a few months ago I reported that Daracon had removed half a metre of topsoil and put that in one location, and then they removed half a metre of the one metre thick clay cap and put that in another location. Well they've now been removing the rest of the cap and some of it is impacted with the gravel layer, which was for gas collection and some of it with waste. The clay has been a good fluffy layer material for that and a lot of that has gone into the last quadrant which we're just completing at the moment. The southwestern quadrant, it's been a good fluffy layer material for that. They started off by removing the cap at the western end and they removed about 20% of the cap and started exposing the waste and they'll slowly work their way from west to east.

### Project Update – Cell Construction



Dickson Road North being sampled by Ramboll – 16 samples taken and no asbestos was detected.

### Project Update – Cell Construction



Water sprays being tested at the Capped Waste Stockpile as @ 28/4/23 prior to starting the removal of mixed smelter waste. The water helps to suppress any dust from the gypsum.

### Project Update – Cell Construction



PRG Aerial view of the capped waste stockpile – 2/5/23. Impacted cap PUT material is suitable for fluffy layer in the cell.

So this slide here, which was the day they first started removing the mixed smelter waste, was Thursday the 4th of May. This is where we started adding the gypsum to the waste. So if you remember, I've spoken about this before, under our the conditions of consent, we have to add 10% by weight of gypsum. So if there's 20 tonnes of waste in the truck, we've got to add 2 tonnes of gypsum, and then it goes through the water sprays. The way the system works, so in this picture you can see the bulldozer stripping off and pushing the waste to the western side of the stockpile and then there's a 36 tonne excavator that's fitted with load cells and so he can weigh out into the 40 tonne dump trucks. They park on the road just to the West of the waste, and somewhere between 20 and 30 tonnes of waste gets loaded into each truck and then he tells the driver and the guy in the loader the weight and then the guy in the loader just divides it by 10.

So if it's 26 tonnes, he's got to add 2.6 tonnes of gypsum, and they're recording that. There is a recording system in both the digger and the loader and the truck driver is actually writing it on a sheet as well as the excavator driver and the loader operator. So here you can see looking at it from a different angle, the dozer, which is a D9 dozer and then the digger. One of the things we were worried about was ammonia because we've done monitoring for the last 30 years and we haven't detected any hydrogen or methane, but we have detected small amounts of ammonia so the operator in the dozer and the excavator, they're wearing personal monitors that detect a number of gases like hydrogen, methane, LEL, which is the volatiles and ammonia as well as some other gasses like carbon monoxide. And the only thing that they've detected is ammonia and sometimes the dozer drivers registered a bit because he drops his ripper tines at the back of the machine and he's sort of raking the surface as a way of releasing any built up gas. But if they register any gas, they have to leave.

TT: All good now.

AW: Yep, if they get a reading, they carry a mask. So a half face respirator fitted with a special filter called an ABE filter for acid gases as well as a P3 particulate filter and if they detect any ammonia they have to put their masks on straight away and then they leave the area, wait five minutes and go back. At the moment we're managing that quite okay. It's going well. The people in the trucks, aren't getting any readings that I know of.

MU: Andrew. Sorry, I've interrupted now. I'm just interested to know if you've found anything interesting coming out of the cell at

### Project Update – Cell Construction



Capped waste stockpile as @ 4/5/23 – the day that mixed smelter waste removal and gypsum addition started.

### Project Update – Cell Construction



Capped waste stockpile as @ 4/5/23.

this point in time. I remember we talked about potential for shopping trolleys and old bulldozers and various things.

AW: No, it started off just fine carbon, almost carbon dust, lately in the last week or so we found like bits of anodes and some cathodes and a couple of collector bars. But we haven't found this elusive forklift that people have reported or anything like that.

MU: And no gold ingots or anything like that yet?

AW: No, this next slide shows the waste being compacted in the cell. That's the 825 landfill compactor, and there's the D6 dozer in the background. The dozer spreads the waste and he's got GPS in his machine. He's working to a certain filling plan like working to target RLs or elevations and then the compactor's going around and compacting the waste. And we're keeping, both Daracon and Hydro, are keeping a close watch on what we call the global density and that's measured by - we know the mass of waste that's gone into the cell because we know we weigh every truckload of waste that's going in, and then each week, Daracon are doing a survey using a drone and from the cut to fill balance they know the volume of waste in the cell, so we divide the tonnes by the cubic meters and it was sitting at around 2.2 to start with, which I guess is because we had a lot of clay and other soils in there. But now that we've started adding carbon, and I know the carbon is around 1.6 tonnes per cubic metre, like the blocks, the anodes and the cathodes, the density is coming down and obviously as the density comes down the volume - that has an impact and an effect on the volume, it increases. At the moment it was sitting at 2.0, but we're keeping an eye on that, that every 0.1 tonnes per cubic metre, it comes down in tonnes per cubic metre is about 15 to 20,000 cubic metres of more volume. But at this stage we've got enough volume in the cell. We're tracking OK on that.

MU: So basically in removing it from the cell and mixing it to an extent - you're basically picking it up and dropping it over there, you're mixing it up and freeing it up and releasing that density, and you want it to be dense again so that you can fit as much as you can into the cell and keep the cell lower and not have to change anything.

AW: Yeah, I mean, that's true. Like anything you dig up, if you're digging up virgin ground, the virgin ground has a higher density than what you're placing. The gypsum itself has a low density. It's about 0.9 to 1 tonnes per cubic meter, so it has an effect. But we've allowed for that and we know that the carbon has a lower density than the soils, but on the other hand, the bath has a higher density than the carbon, so it's just something we have to keep an eye on. But at this stage we're tracking okay and we're going to meet our target. We should be pretty close to the 345,000 cubic

### Project Update - Cell Construction



825 landfill compactor & D6 dozer working in the cell spreading & compacting waste on 12/4/23. Daracon and Hydro are keeping a close watch on the global density of the waste as measured by the total mass of waste transferred and the surveyed volume (currently it is 1.90 T/m<sup>3</sup> versus 1.60 T/m<sup>3</sup> minimum) as density affects volume.

### Project Update - Cell Construction



PHOTO: TWTP - Temporary Water Treatment Plant and LD03 treatment dam as @ 2/5/23. Note that both leachate from the ECC and the 7A sump is being treated. 27 hatches or 3.7ML of low fluoride leachate has now been treated.

metres that we designed for and the cap will be somewhere between plus minus half a metre of the target elevation when we're finished.

The next slide is on the temporary water treatment plant. So I've updated the photo because the old one was out of date. You'll notice there that the tanks on the right hand side, we now have six tanks, not four. A couple of months ago we got an extra two tanks put in and that way Enviro Pacific Services, who are a subcontractor to Daracon, they've actually doubled the throughput of the plant, so originally the concept was to fill one of those tanks on a four day cycle, which gives you enough time to get a sample, sent it to a laboratory, get it tested, get the results back and then release it. Now they're doing two tanks per day on a three day cycle, so that's doubled the throughput. At the moment there's two sources of leachate, which is the dam up at the cell that we saw earlier, which is actually in this photo. You can see on the left-hand side that water is getting pumped in. On the right-hand side, you'll notice there's a lay flat hose coming from 7A furnace building which is on the right and that's getting pumped in as well. So that goes through the treatment plan and there is low levels of fluoride probably around 20 to 30 milligrams per litre in the raw leachate and the treatment plant is bringing that down to about 10 and then that treated water, once it's sampled and it passes, it's released into a drain on the right hand side of the photo and that goes to our eastern surge pond and then to our north dam and then it's irrigated to the irrigation area under our license. It has to be less than 15 milligrams per litre of fluoride to be released from the water treatment plant. And so far, we've treated 27 batches or 3.7 megalitres.

This next photo is just showing this is where we're pumping the water out of the leachate sumps. That's the south one. And we've made up our own level probe. It's just that bit of plastic conduit. We've got electrodes in there at 1 metre intervals and we know, because the leachate is conductive, we can check what the level is, just got like a little digital readout which you'll see in the next slide.

By pulling the conduit out - and then in this case, pulled it out about half a metre. And on that readout, it's on the 1st row of green lights. Each row of green lights is about 250 mm. So anyway, it's just under 400, so 360 mm or 18%. Daracon also have a probe. It works on a different principle and that's mounted on the submersible pump, but we just do our own check as well, just to check our readings against their readings. And so far, Daracon have been managing the water levels okay. When it rains, it takes a long time for the water to get down to the sump. So they must be doing a good job with compacting the waste cause it sort of percolates down through the waste very slowly,



like it takes weeks before we see an effect from the rain. So that sort of helps us because initially we thought it was going to get straight to the sump straight away, but it doesn't. It takes a long time to get down there.

And I guess as we fill the cell, it'll take even longer as we get more waste in there. Another thing just on the safety side, we set up traffic control, so Daracon have got boom gates and traffic lights at the main intersection between their haul road and what we call Wonarua Road, which was the main road through the site and because of the Hunter Power Project, there's a lot of traffic now from Snowy Hydro and UGL, their principal contractor, going through that intersection, and so far it's been going okay. There hasn't been too many problems. We are looking at maybe putting some extra flashing lights in, but anyway, it seems to be working OK and there's two traffic controllers there as well that have to raise the boom gates if someone's waiting, they look down both ways, make sure there's no dump trucks, then raise the boom gates so people can go through and then as soon as they see a truck, they close the boom gates.

MU: So the truck has right of way?

AW: The dump truck has right of way, correct. These are the dust deposition gauge results from the five locations around the site, and that's the results for March. I don't have April's results yet, sorry for that, but continue to be low levels, so that's good.

And that's just the wind chart which we can use if we did get a higher reading, we can look at whether that's caused by us.

MU: So I'm guessing that's the last of yours Andrew.

AW: That's the last of mine. I'll hand over to you now, unless there's any questions.

MU Yeah, we might just go to the floor and see if there's anyone with any questions about the remediation process and that cell construction filling and so forth.

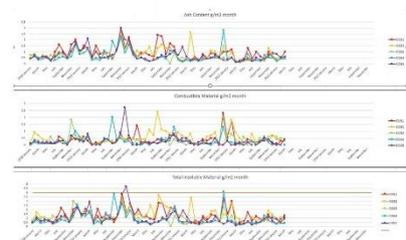
RB: I saw something that I was going to raise your attention to. I thought might be interesting to have a quick chat about. One of the challenges we might have mentioned at previous meetings and if not then I'm mentioning it now that we've been dealing with is thieves. We've had just about every day people coming on site and coming into this building in particular and stealing copper out of these cables. So you can see these cables are hung down here. That's not because we put them there. It's because the thieves have been pulling them down and chopping bits of cable off and basically scampering out in the bush after they're done. I

### Project Update – Cell Construction



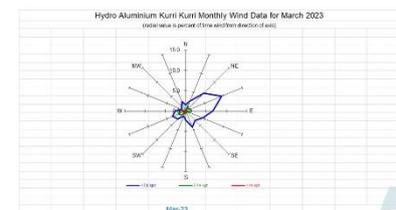
Boom gates and traffic lights in operation at the intersection of the Daracon Haul Road and Wonarua Road (main road on site) on 9/3/23.

### Dust Deposition Results – March 2023



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### Wind Rose Chart – March 2023



CREATING PROSPEROUS FUTURES

### Project Update – Cell Construction



7A/B wrapped asbestos storage area with 7A north tub in the background on 18/4/23.

was going to say it's nearly impossible, but it actually is impossible to stop them and to deter them. Snowy Hydro, who are our neighbours over this side, they have full time security there. They have the whole place lit up and they've still had thieves come in and pinch thousands of dollars' worth of copper cable. We had the police on site, both talking about plans, what they're doing, they've come onto the site at different times when our security cameras have identified people onsite. And they're far smarter than - I won't say they're smarter than the police, but they're aware that that's a risk and they run away.

MU: Is the building going to be retained, Richard.

RB: No.

MU: So what's to stop you from taking all the copper out now?

RB: Well, we couldn't take it out because of the waste, but as we speak ... Here's another example where they've been in and have been snipping cables where they can, but that's what CMA will be doing as of now. So they'll go in, strip out the remaining copper and pull the building down basically. But look, we see traffic, we've got a few cameras around the site. We see cars at all hours, like I said, it's nearly every night, you know, we're picking up motion of people on site. Very frustrating.

AW: They even went to the extent of vandalising Daracon's telehandler that was being used to unload the asbestos because they were using the packs of asbestos to climb up to remove the cable and they worked out if they slowed Daracon's progress that would give them more time to get the copper out. So they're actually climbing up on the pallets, using them like ladders. So by putting a knife in the four tyres of the telehandler they tried to slow them down. We also disturbed them early one morning and one of them dropped a large hunting knife on the ground.

MU: So they're armed?

AW: Yes. And we've also caught them on the security camera walking around with steel bars. So we don't really want to confront them because we know that they're armed.

MH: Are they mostly older individuals, or do they appear to be young kids?

AW: I would say that they're younger people. I don't really know.

RB: To your point, Mitchell, these guys are pros. Guys and girls There are girls. They're pros. This is not an opportunist thing. This is very well coordinated and planned. They basically come in, they do all their prep, then they've been going in some cases out to locations further afield where they strip the coverings off the cable,

### Project Update – Cell Construction



PROSPEROUS FUTURES South tub of 7A bake furnace as @ 11/5/23.

### Project Update – Cell Construction



PROSPEROUS FUTURES 7A/B wrapped asbestos storage area – Dec 2020.

then they send a vehicle in, they load the vehicle and that vehicle's out. So the vehicles in and out very quickly.

MH: Quite a sophisticated operation.

RB: And look frankly from what we've heard from the police, this is not unusual at all.

Anyway, thought I'd just share that little fun with you.

When I went to prepare my slides for today's meeting. I was looking at some of the zoning and biodiversity stuff and it was very easy for me to do what I needed to do because nothing's changed from the last CRG meeting. Zero. We've had, if you recall, the Maitland rezoning has been done a long time, and the Cessnock one prior to December last year some of it was done. It was done in accordance with an idea of the PMF at the time we've done some work which I think I actually talked about at the last CRG meeting, we've done some work to verify the PMF and we've sent that through Council to the Department, which is all sweet. No problems. We'll adjust to that new PMF, and it's been sitting with the department now for two months maybe just to make the plan, there's no issues holding it up. It's sitting with their GIS team or somewhere. There was an election in the way, that sort of held up a few things for a few weeks, but in the meantime, the third iteration or the third phase of that process is progressing and a flood consultant was engaged to evaluate the flood hazards in accordance with the latest thinking around the appropriate flood planning levels and how that sort of fits against flood hazards in relation to the recent flood inquiries. That flood work has been done. It's been presented to Council and it has now been sent through to the Department for their consideration to adopt the full planning proposal as it was originally considered or thereabouts, very close to that.

MU: And Richard, I think everyone on the call probably knows the PMF is **probable maximum flooding**.

RB: Right, correct. That is what it means. Sorry, I apologize for that.

MU: OK, cheers.

RB: So nothing more to report there and sadly the same thing for our BioCert agreement. It's probably even more frustrating in the sense that we had a meeting with BCD in November last year where it was agreed that the course of action would be for BCD's and the Department's legal team to prepare a draft BioCert agreement, that's the legal instrument that will determine that all of the obligations of the landowners for impacting biodiversity and the I'll call it a promise, sounded like a promise to me, was that was going to be provided to us prior to Christmas so that we could then review the draft and then identify any sort of gaps or

**Rezoning**

**Rezoning (Cessnock)**

- Still progressing with DPE
- Issues still present about flood impact
- Engaging consultant to model and address requirements of DPE/Council to allow full extent of rezoning proposal to be realised.



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REZONING MASTER PLAN

CREATING PROSPEROUS FUTURES

**Bio-Certification**

- BCD preparing draft Bio-Cert Agreement for review



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negotiate any sort of remaining issues. It's a bit after Christmas now and we're hunting that down as best we can with a number of different contacts that we've got both from within BCD, but also with the PU, which is a state government entity that's, in theory, designed to facilitate moving these type of issues along, but they also are having very much difficulty moving this along. So I don't know when that's going to happen. Soon I hope.

And I think that's all I had.

MU: So Richard, are McCloy-Stevens on site in the Maitland part - are they able to do early works? Are they moving forward? Do we know?

RB: Look, I can say what I know, but it might be actually Robert, if he's still on the call, he might have a bit more information, but as I understand it their first DA for the resi development in Maitland was going to a Council meeting now-ish for final endorsement. They were waiting on what they call a satisfactory arrangement certificate from the state government to identify that all of their requirements that they had for building intersections and dedicating it and different things that's required. But talking to Shane, he's not concerned about these things. Everything seems to be on track and expects that we'll see some site action probably early next year. That's about on track essentially.

MU: Robert did have to drop off. He put a message in the chat. So early next year?

RB: Early next year.

MH: I'm not sure if Jenny was going to touch on this or anything as while we're on the topic of the Councils and the development stuff, Cessnock currently has our draft chapter for our Development Control Plan for our side on exhibition at the moment with the information about what's to be put in place for the development in that area, just had the drop in session today at the Heddon Greta Golf Club today, but it ended up to be a bit more of a councillors asking questions and not as many community members coming and asking questions. But, it seems to be a decent delay at the moment, but once that's in place, we're still waiting on the rezoning.

JM: Yes, the exhibition concludes on the 31st of May. From there, obviously, we collate submissions and consider whether there's any amendments needed to the DCP that we have and then reporting to Council for endorsement thereafter. But yeah, the flooding issues are still being resolved as well.

MU: Do we have any other questions of Richard or Andrew around any of this at all?





RB: No questions, but I will just add in Alan's absence that I went up and did a run-through more or less this type of material just to sort of current status update for the Retired Mine Workers in Kurri last week or week before. So another group of people that you know we've been staying in contact with where we can.

MH: Michael, you able to unmute Rosa from your end? She's having a bit of trouble trying to ask a question and I didn't know if you had some more control over it.

MU: I don't think so. I'll give it a go. I can disable her mic and then I can potentially reenable or allow the mic, but no, she's still muted.

MH: The only thing is she's just been sending me through a message. Her initial question I think was answered previously about whether or not it was possible to have that copper removed, but you mentioned that that's sort of in the process now of the building being demolished.

MU: She's back on. We can hear you now, Rosa.

RG: Hi, how are you? Sorry.

MU: It's alright.

RG: I had a question about the ammonium. Now I feel like I'm at high school and I should have paid more attention in chemistry. But can you just explain to me how dangerous that chemical is and if it is and what sort of level makes it dangerous for community members?

AW: So ammonia, the chemical formula is  $\text{NH}_3$  that's got one atom of nitrogen and three atoms of hydrogen, and it's a gas that has a pungent odour, the human sensory system is very sensitive to ammonia. The time weighted average exposure limit, so exposures on an 8 hour shift is 20 ppm. You should be below 20 ppm and then the short-term exposure limit which is what they call the STEL, is 35 ppm. We haven't got to those levels. The guys working on the waste, like in the machines, I've heard readings of around 15, that sort of about halfway to where it would be a concern. The reason the ammonia is there is because the air is 78% nitrogen and nitrogen reacted with the carbon in the carbon materials and with the molten aluminium in the dross at higher temperatures and formed nitrides which then react with water vapor, pick up hydrogen in the water vapor which makes the ammonium. Once the cell is capped, we're expecting to have very low levels of ammonia. Maybe in the order of 2-5 ppm and there won't be any risk to the community. At the moment the main risk is the people moving the waste. I mean people in machines sitting on top of the waste at the capped waste stockpile and at the cell, but no one in the community will be at any risk.



RG: Thank you very much. That was very informative.

MU: Yeah, very detailed. Thanks, Andrew. Starting with the chemical composition of ammonia, that's fantastic. Starting with basic principles. Thanks, Rosa. That was there anything else that you had while you were on unmuted?

RG: I was just saying to Mitch said I was actually asked about the copper stockpile that you had out there. So people in the community must be talking about it because it's got to me, and they've asked who to talk to if they wanted to come out and pick some up, and I had no idea. So it's interesting that you mentioned that because they're obviously talking about it and yeah, so you guys are onto it. So it's all good.

MU: There's a bunch of guys at Maccas at Kurri Kurri. They're just selling it out of the back of a truck. Interesting.

RB: I should point out that it's not a stockpile, it's actually just in the building as you would have it in the building if it's operational. Our biggest concern is not the value of the copper, it's the risk that people are putting themselves at by trying to get in there and get it. Now we have an obligation as a landowner and as a business to protect people, whether they are idiots or not, to protect them from themselves, so our main concern is that they come in there and they try and climb up a structure that's not suitable for that or that they step in a hole and don't come out. So that's the biggest risk that we see - the value of the copper means nothing to us. So the reason that we would be trying to get rid of it is to remove the incentive for people putting themselves in harm's way.

RG: Well apparently from what I've been told there was only three weeks' worth left. So if that helps you.

RB: That's unreal.

RG: Yeah, they said there was only three weeks' worth of copper left and they wanted to know if I knew anyone out there that they could just come and collect it because apparently a trailer load was worth \$6000 to them.

RB: Copper is worth a lot of money. That's right. And that's why people are putting themselves in harm's way, to actually to steal it essentially. It is the property of the demo contractor frankly, that's their bread and butter. That's how they make money, demo contractors. So by selling scrap and it's a high value scrap. That's interesting, Rosa.

RG: I completely understand. But people think that my shop is the second Council building and I get asked a lot of questions every day and that was one of them, and that was last week, they asked me that, so I was waiting for this meeting to bring it up with you.



RB: That's really interesting. As I said, we've had the police onsite. This is a difficult issue for the police to deal with because it's not easy to catch them in the act red handed. It's such a big site with a lot of access offsite, heading sort of north to Old Maitland Road. They can go through the bush, they're cutting fences, all the time. It's really not worth our while fixing them. But I would like to think that the police have some ideas around how this stuff happens and where it goes, because I think that they've obviously got an outlet. Interesting, thanks.

RG: Thank you.

MU: So Toby I need the trailer back in about 2 weeks, if that's okay. Any other questions of Andrew or Richard before we sign off, Toby?

TT: Could I just ask when does Hydro anticipate leaving the site and basically handing everything over to McCloy-Stevens. Is there a projected time frame at this point?

RB: Yeah, there is. There's a couple of different time frames for different land transfers but the main one we hand over to McCloy Stevens is where the smelter site is. So that's the finish of the remediation. That's the end of 2025 is currently what it's contracted to.

MU: All right.

MH: Is that not the whole area of the footprint that they're planning to use for industrial areas though, or is that just a certain spot of that footprint?

RB: Look more or less, let me just see. I did have this up on a previous slide.

MH: Because I know, it might have been at the last CRG meeting we held, there was some discussion about some very early interest in areas of the site that may have been first off the rank to be used for industrial purposes.

RB: Yeah, there is. So they own part of it already, a big part of the industrial side of it already?

MH: Yep, I'm just looking ...

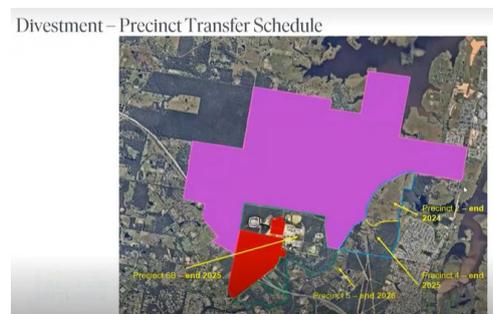
MU: And once it's rezoned, it can be redeveloped?

RB: Yes

MH: that was sort of my question. I didn't know whether they had a hold of any of it as of yet.

RB: Yeah, they do.

MU: And so the notion is that once each parcel of land is declared clean and certified and ready to go, they can basically hand over



in pieces of the puzzle if you like and then that's theirs to work on from there.

RB: There you go.

MU: Sorry, Toby. Did you have something?

TT: Yes. So I take it everything West of the Hunter Expressway would be basically available to McCloy-Stevens now would it?

RB: I'll show you this map so you can see that. Can you see that?

MH: Yep.

TT: Yes

MH: I'm just zooming my near maps out so I can match a similar sort of section that you're showing there.

RB: This is all the shaded land is owned currently by McCloy-Stevens.

MU: The purple shaded land?

RB: The purple shaded and the red.

MU: And the red, right.

RB: So that's not quite true. It's not owned by Hydro. If I looked at those two lots there, if you can see my mouse moving, that's the Hunter Power Project, actually owned by Snowy Hydro.

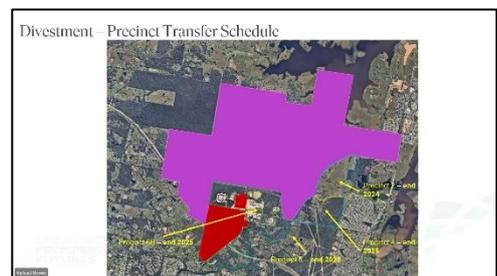
MU: Yeah, the smaller red dot, red blob?

MH: So pretty much everything to the east of Hart Road is still Hydro?

RB: Yes, correct. And the precincts as they currently sit - you can see the timing for that precinct transfer. So these two residential precincts in Cessnock LGA, N24 and N25, the main smelter footprint, which is really limited by the completion of the remediation, is N25 and then the final residential type precinct is actually N26, which is off Bowditch Avenue. That's not to say with any of that if we have land that is remediated, signed off, etcetera that it couldn't transfer sooner if the opportunity arises. So that's something which we've left open in the contract, which basically means all this residential stuff has already been signed off and a good portion of the industrial, if you like, and business area - so all the business park area has been signed off. It's really only the smelter footprint itself and even parts of that are already remediated and could in theory be signed off for a land use like the Snowy Hydro project has already been.

MH: Thank you. That's very good info.

MU: There's a fair bit there to take away, so thank you for that. Thanks Andrew for that detailed presentation and those responses and Richard as well. I will just mention that Richard has





provided me some updated content for the Regrowth Kurri Kurri website and I've been through and updated that now and Richard any time you want to check my work please do. We just changed a few things around and brought a few things up to date that were a bit shamefully lacking currency and they're now much better.

Are there any further, final questions or comments? Great. Alright, well no other business I think that means so the only item left is to talk about the next meeting and we've got that slated for three months' time from now. I've got that matching up with August the 17th being the third Thursday in the month, so August 17 is to be confirmed. But that's what we've got down. Anyone have any issues with that date? Lots of shaking and not any nodding, so that's excellent. And Jenny and Rosa, I can't tell if you're nodding or shaking. I'll just assume that you're not, alright. OK, great. Well, alright, with that done. Sorry, we got a thumbs up from Jenny and Rosa, were you going to say something?

RG: I'm good. Thank you.

MU: Excellent, excellent. We'll see if we can't get one of the Gray brothers in next time as well, and who knows who else. Thanks very much everyone.

## **6 Meeting close**

Meeting closed: 7:08pm

Date of following meeting: 17 August 2023