



Note that minutes are paraphrased to an extent and may not exactly match actual statements.

Project	Hydro Kurri Kurri site redevelopment project	From	Alexandra Parker
Subject	Community Reference Group	Tel	1800 066 243
Venue/Date/Time	Thursday 23 July 2015 Hydro offices, Kurri Kurri 6.00pm – 7:30pm	Job No	21/23175
Copies to	All committee members		
Attendees	Mr Rod Doherty – President Kurri Kurri Business Chamber Mrs Kerry Hallett – Hunter BEC Mr Colin Maybury – Kurri Kurri Landcare Group Mr Brad Wood – Community representative Mr Toby Thomas – Community representative Mr Andrew Walker – Hydro Kurri Kurri Mr Richard Brown – Managing Director, Hydro Kurri Kurri Mr Ian Turnbull – Manager Natural Environment Planning, Cessnock City Council Clr Arch Humphery – Maitland City Council Mr Kerry McNaughton – Environmental Officer, Hydro Kurri Kurri Mr Bill Metcalfe – Community representative Clr Morgan Campbell – Cessnock City Council Mr Shaun Taylor – Environ Mr Mark Roser – Senior Strategic Planner, Maitland City Council Mr Michael Ulph – CRG Chair, GHD Ms Alexandra Parker – CRG minutes, GHD		
Apologies	Mr Alan Gray – Community representative Mr Ian Shillington – Manager Urban Growth, Maitland City Council Ms Debra Ford - Community representative		
Not present			

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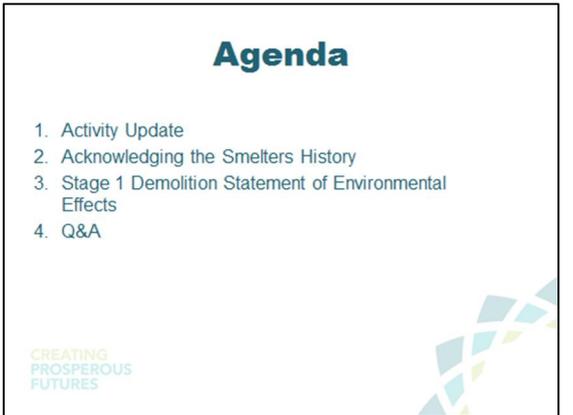
Michael Ulph (Chair)
Welcome and Acknowledgement of Country

Meeting commenced at 6.01 pm



Meeting agenda

- Welcome and meeting opening
- Apologies
- Acceptance of minutes from the last meeting
- Project update
- Community engagement activities – acknowledging the history of the smelter
- Demolition DA – Statement of Environmental Effects
- CRG questions and answers
- General business
- Next meeting / Meeting close



Welcome and meeting opening

Michael Ulph welcomes the committee and confirms that Debra Ford, Alan Gray and Ian Shillington are apologies. Welcomes Mark Roser who is attending as delegate for Ian Shillington.

Last meetings minutes

Michael Ulph: The next item is the acceptance of the last minutes that came out just recently. Can I have someone please move they are true and correct.

Minutes moved as a true and correct record by Kerry McNaughton and seconded by Bill Metcalf.

Project update

Activity Update

- Early works progress
 - Asbestos removal
 - Packing coke removal
 - Bake furnace delining
 - Crushing of refractories
 - Structural steel fabrication & installation
 - Bulk oil removal
 - Filter bag removal
 - Superstructure / busbar removal

CREATING PROSPEROUS FUTURES

Andrew Walker: Since the last meet we have been progressing with our early works. Asbestos removal, has actually now finished. Packing coke removal etc.

One of the items we have been working on in line one which removed all the duct work was asbestos gaskets at the flanges of those steel ducts. It wasn't in the original scope, but we found we had to remove them to get to the asbestos out from the floor penetration. We have taken all that out now.

Line two and line three we've removed all the insulators. There is a hold down bolt, there are actually four bolts that hold the pot columns into the pedestals and they have asbestos insulators. It all had to be removed as well as other insulation on the cathode flexors. That's all finished now and apart from that, the only asbestos left is in the scrubber duct work which will be done in the stage one demolition and then a few miscellaneous items, in some of the offices and so on, like vinyl floor tiles and things which will be done early next year.

We have also been doing asbestos removal in the buffer zone. There is five properties Hydro own in the buffer zone that were vacant so they have taken the opportunity to remove the asbestos there and those houses will be demolished. Is that right Kerry?

Kerry McNaughton: That's correct, yes.

Andrew Walker: The bake furnace, we have also been removing refractories. In order to do that we had to remove the packing coke, the synthetic mineral fibre. We have de-lined the cross over so it can be removed and taken out the through walls and head walls.

Asbestos Removal - On Site




Line 1 Fume Ductwork Line 2/3 Insulators

All ACM gaskets removed from fume ductwork in Line 1. Line 2 and 3 ACM removal complete. As much ACM as possible has now been removed from all Potlines - the rest will be done as part of Stage 1 demolition. Some miscellaneous items removed in Carbon Plant. ACM in other miscellaneous buildings (vinyl floor tiles, etc) will be removed in H1'16

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Asbestos Removal - Buffer Zone




Asbestos removal completed on five Hydro-owned properties in the buffer zone.

CREATING PROSPEROUS FUTURES

Activity Update

- Bake Furnace Delining
 - Packing coke removal
 - Synthetic mineral fibre removal
 - Crossover delining
 - Flue wall and head wall removal

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These photos show the packing coke being removed; we are now about half way through that there are about 2,500 tonnes in total, about 50% complete.

We have started in the last two weeks bagging the packing cable up in the old re-melt pot lining building. The truck dumps the coke and then we are bagging it so it can be sold to another aluminium smelter to be recycled.

Activity Update




Bagging of packing coke has commenced for future sale to another aluminium smelter

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These photos show where we are up to with the bake furnace demolition. This is the south side of the furnace, we demolished about a quarter of the length of the furnace there so about six sections have been removed, ready to install the ramps which will allow us to run excavators and trucks into the furnace to do the remainder of the demolition.

We will start this week on the north side, de-lining with an excavator.

This is the crossover before and after. So we have been de-lining that for the last three to four weeks and we are nearly finished. The photo on the right shows the steel duct with the refractory removed. It was all manual work; it had to be done manually. That is the reason it has taken so long. That steel duct will be lifted out and build the ramps.

We have also been crushing refractory; some of the refractory that we took out of the clay borrow pit as well as refractories that has come out of the bake furnace has been crushed. We had a mobile crusher on site, dual crusher screen, and cone crusher, to crush it to minus 40 which is a common engineering spec for structural ramps and things.

The next work that has to happen is, we have to put some structural steel in so to strengthen this beam here that supports a suspended slab. We have to put

Activity Update




Packing coke removal approximately 50% complete. 1,250T of packing coke still to be removed

CREATING PROSPEROUS FUTURES

Activity Update




South side of ABF2 ready for ramp installation

North side de-lining in progress

CREATING PROSPEROUS FUTURES

Activity Update




Eastern crossover duct currently being de-lined

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some props in on these columns to stiffen them so the suspended slab could take the weight of the trucks. Once that is done then we can obviously build the ramps out of that crushed refractory.

We are also about to start bulk oil removals. We awarded that work to a local firm at Rutherford. They will be taking 19,000 litres of HTM oil, 21,000 litres of hydraulic oil.

Michael Ulph: HTM?

Andrew Walker: Heat Transfer Medium, so it is a heating oil used in the batch mixes in the green mix plant.

That starts next month. On Monday we will start to remove scrubber bags and filter bags across site.

Activity Update

- Superstructure and Busbar Removal
 - Tender evaluation process being finalised
 - Contractor mobilisation in August
 - Work to commence in September
 - Will generate 3,600T of ferrous scrap and up to 4,000T of aluminium busbars.
 - Cathode busbars to be removed as part of Stage 1 demolition

CREATING PROSPEROUS FUTURES

Super structure and busbar removal package, we are very close to awarding that. We have been evaluating tenders over the last few weeks and having tender clarification meetings. That is quite a big package, that's about 12 months' worth of work. The contractor should be mobilised in August and the work should start in September. About 3,600 tonnes of ferrous scrap and 4,000 tonnes of busbars, mainly the anode type of busbar. We are going to leave the cathode busbar in situ until we do the stage 1 demolition. The cost to remove it now is too expensive. It doesn't currently justify to do it now. The other things we have been working on with Shaun's help from Environ, is the stage one demolition and DA. Shaun is going to talk about that in more detail later. So that has now been finalised ready for submission. We had to engage a quantity surveyor to check and confirm the cost of demolition. We are just going through that process now and it is nearly finished.

The other work that is happening is the containment

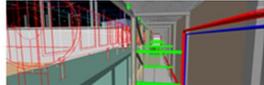
Activity Update



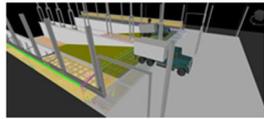

Crushing of 3,000T of refractory bricks for ABF2 ramp construction

CREATING PROSPEROUS FUTURES

Activity Update



Structural steel currently being fabricated to strengthen a suspended concrete slab



Crushed refractory will be used to construct access ramps to continue de-lining of the refractories with excavators and dump trucks

CREATING PROSPEROUS FUTURES

Activity Update

- Bulk Oil Removal
 - This work has been awarded to a local firm
 - HTM oil system (19,000 litres)
 - Larger hydraulic systems (21,000 litres)
 - Work to commence in early August
- Filter Bag Removal
 - Mikropul to commence work on 27 July

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cell detailed design. We have been having tender clarification meetings with short listed tenderers; we finished that today actually so we should be ready to award that design in next couple of weeks.

The clay borrow pit, which is the area where they took the clay for the capped waste stockpile. It was capped 1995. We have nearly finished excavating all the refractories out of that so there is a few photos.

This is the screening that is happening, screening the refractory and casting out of the material that's being excavated. We have been back loading the fines. So this area here was already validated by our environmental consultant. We have been putting the fines back up there so they can be used later on for other uses on site.

This is standing on top of that pile of back loaded fines looking at the excavation. You can see it goes right out here. You have to be there to see it, but it's a huge volume of material that we pulled out. About 55,000 cubic metres of material. That's another stockpile we had to screen. We will have to move the screen up there to do that.

That's a panoramic shot, which gives a better impression of how much we have excavated out.

Richard Brown: From the last meeting we talked that we were about to lodge the rezoning proposal. Both of those were lodged as planned, Cessnock and Maitland Council rezoning proposals have been lodged. They are going through the process of being reviewed internally. We will wait for that to progress before we are seeing how that unfolds I suppose.

In terms of bio certification, we have sent the assessment report to council for review. I assume you have had a look at that Ian or are in the process of looking at that.

Ian Turnbull: Yes

Richard Brown: So I guess the next stage once council has had the opportunity to review and comment on that we are planning to meet with OEH to discuss that further.

Colin Maybury: Can I ask a question please?

Richard Brown: Sure

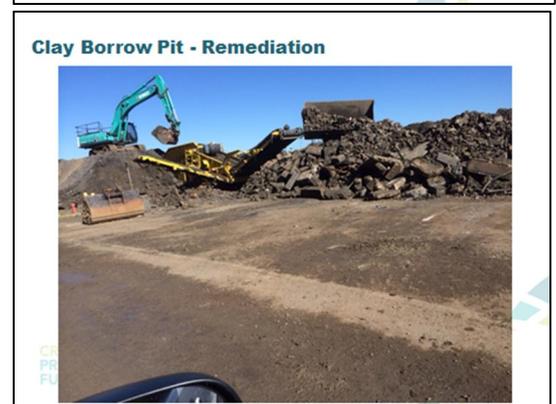
Colin Maybury: The refractory that you are saying you are excavating now. Why didn't that go into Mount Alcan rather than go up there into the clay borrow pit? How long is it going in there for?

Richard Brown: I don't know. Andrew?

Activity Update

- Stage 1 Demolition DA / SEE
 - SEE now being finalised for submission
 - Quantity surveyor has confirmed costs
- Containment Cell Detailed Design
 - Tender clarification meetings with shortlisted tenderers have concluded
 - Expect to award a design package in the next two weeks

CREATING PROSPEROUS FUTURES



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<p>Andrew Walker: The reason it didn't go into Mount Alcan is that that clay was actually taken from there to cap Mount Alcan. The depression that was left there was filled with refractory because at the time, in the mid 90's the practice was to keep the refractory on site; it was considered an inert waste.</p> <p>We didn't have any means of recycling it. These days it is possible to get a reuse exemption and use it for things like road base, I believe Tomago are doing that.</p> <p>Michael Ulph: So the stockpile was closed? You couldn't put anything else there.</p> <p>Andrew Walker: You couldn't put refractory in there. It was put in there basically to fill a hole.</p> <p>Colin Maybury: Just sounds by the way you were describing it is that there is a hell of a lot of it there. Is it second cut?</p> <p>Andrew Walker: There is no SPL. It's all refractory. Carbon based refractory bricks because like SPL one of the realities of making aluminium is you have to reline the baking furnace every five to seven years and that generates waste refractory. Over the years we did trials of recycling that refractory, we tried cutting the carbon impregnated part of the brick off and recycling the other 90% of the brick. We actually did trials down in Wollongong with a refractory company down there to try and recycle it back into lower grade bricks. We never actually came up with a viable recycling option that would deal with the kind of refractory we did with over the years.</p> <p>Colin Maybury: How much went to Wangarra?</p> <p>Andrew Walker: Some refractory was used there because of the mine subsidence issue. Some refractory concrete was used there.</p> <p>Richard Brown: I don't know that there was a lot of brick that we got out of there was there Kerry?</p> <p>Kerry McNaughton: Predominantly just concrete.</p> <p>Andrew Walker: Concrete and a bit of castable.</p> <p>Richard Brown: Some of the headwall stuff like larger format stuff. I don't think we got a lot of brick out of it or Wangarra. Most of it is being up there, we tried to estimate how many furnace builds have gone up there, it's a bit hard to estimate exactly how much because you kind of, not only do you have those campaigns where you rebuild the entire furnace but you are also replacing and doing maintenance on the run so your kind of generating material all the time.</p>	<p>Clay Borrow Pit - Remediation</p> 
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Shaun Taylor: It is probably worth mentioning, reiterating what Andrew said, the type of material that refractory is has got reuse opportunity. So we are not talking about a toxic material or...

Richard Brown: We have already got a draft reuse exemption from the EPA for the reuse of that material. Just timing issues as well as all it was. We were approached by Abigroup at the time who were conducting the freeway, were interested in using it as part of the freeway construction but timing didn't work.

So at the moment I guess our thought is, given the large amount of voids, particularly around the bake furnace, it's likely that we will use those types of materials, crushed concrete, crushed refractories as a void filling onsite for when the site is being remediated.

Michael Ulph: Any other questions around that?

Richard Brown: It's probably more a visual representation of what Andrew has just gone through, particularly around the bake furnace. It's just interesting to have a look at.

This is something one of the guys put together today.

Video - Start

Bill Metcalf: Has there been any interest from other smelters in buying it [packing coke]?

Richard Brown: We have got a trial shipment going out to Queensland. But it is only a trial, we would have to evaluate it.

Rod Doherty: By road or ship?

Richard Brown: Road. Its only 20 tonnes.

Brad Wood: Why aren't Tomago taking it?

Andrew Walker: We've approached them but they didn't want to take it.

Bill Metcalf: Is there many local jobs being created by the demolition?

Andrew Walker: Yes, the company that is doing this work, they are all Newcastle based.

Bill Metcalf: That's one of the questions I get asked. Is it generating any work?

Richard Brown: Well there are plenty of cars in the carpark.

Where we can, we are using local people. Even the super structure contract that's going to come out will

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subbie some local guys. We know that.

Bill Metcalf: People ask me how do you go about it?

Richard Brown: I mean it's not really stuff that we are in control of but we are...

Video - End

Bill Metcalf: That's one of the questions that I get asked more so then...

Richard Brown: We are certainly encouraging people to do that, and where there are opportunities for local companies to provide the service that we are after, we will certainly include them in the competitive tendering process.

Michael Ulph: Looks like a lot of work happening.

Bill Metcalf: I feel like crying.

Michael Ulph: Seeing it being pulled down?

Bill Metcalf: Yes seeing it pulled down.

Rod Doherty: One of the comments about demolition of those flue walls, comments from the ex-employees, we used to getting pinged for that, breaking through walls and knocking them over.

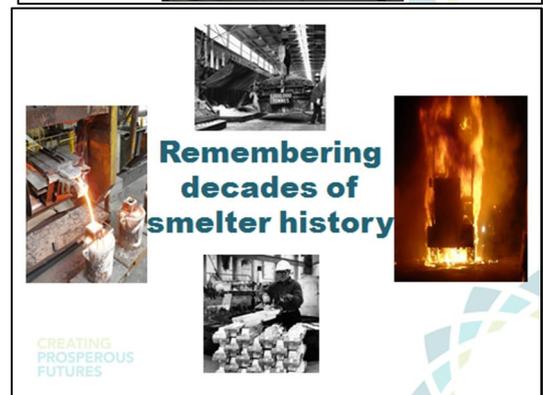
Community engagement activities

Michael Ulph: This bit is me, basically you would be across the fact that we advertised and this is part of the project is to remember the history of the smelter. Actually I think Bill you probably hit on it there saying it makes you sad to see it come down.

Bill Metcalf: I don't know how many times I drove down that road.

Michael Ulph: I think it is important to acknowledge that it has been here for decades under various brand names and so on. Some way of remembering that history would be appropriate. I have got a couple of slides here just to take you through a couple of different ways that it is feasible. But the message that I have got is that we are looking for feedback, we are looking to see what you think would be an appropriate way to do it.

So this is the two memorials currently sitting on the BHP site. The Muster Point, the first one has been there for some time now and the one in the bottom right is only quite recent and I think it's a memorial, if someone else could tell me if they know, but I believe it is about the workers that lost their lives at BHP during the time it was in operation. The muster point is basically just commemorating that the steel



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works was there for such a long time.
 Kurri is, as you know, known for its murals. There are many murals. Rod, how many murals?

Rod Doherty: 56.

Michael Ulph: 56 murals in and around Kurri. This could be the 57th mural. Or something like that.

Here's an image that I saw that I thought was quite interesting. It is a commemorative walk in relation to the Vietnam war. It's quite spectacular.



Then there are a variety of other things. You will notice that sculpture in the middle there is quite familiar if you live in Kurri. But there is a range of other types of sculptures that can be made or commissioned.

The one on the bottom right is a company that clearly put their name of the sculpture. But they all kind of symbolise mining in the bottom left, though. I'm not sure what the top left is, I am not sure what many of them are. They are all significant.

Fountains.

Gardens. There are gardens and garden chairs and seats and floral displays. Sort of a combination of various types of art or planning or design or so on.

I think that's about me, that's all I have.

Richard Brown: That looks like snow up there?

Michael Ulph: Yes it does.

Richard Brown: I don't know if we are going to get snow on our garden.

Michael Ulph: The other idea is the idea of maybe a scholarship or something like that. Some sort of research grant, or trust for a research grant. Just throwing ideas out there. But we are looking to see what the community, particularly the Kurri



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community around here think is a good idea.

As representatives of that community, we are interested to hear what you think. That's meant to be a conversation starter. Do we have any conversation around that?

Bill Metcalf: I think there should be something.

Richard Brown: I think one of the things that you have said previously Michael that I like the thought of is in previous projects of this similar nature this is an issue which often gets raised. We have got to make sure we don't forget the past. But as you get stuck into the detail that's the first thing that kind of drifts off.

Michael Ulph: The urgency versus the important. We could leave this thing that is important to the end but my experience has been, in a project many years ago we were planning to do something, planning to do something, planning to do something and suddenly the lights are being turned off and everybody is gone and we didn't quite get there. It's quite relevant to be thinking about this at this point in time.

Rod Doherty: Just a comment on this particular area. Mining from the late 1800's through to 1965-67. It wasn't until, in the last 20 years they started popping up bits and pieces around town about the heritage of mining. So the miners packed up and left and left nothing really.

Michael Ulph: Yes

Rod Doherty: There was no consideration about what legacy's they may leave for the community.

Michael Ulph: I think that's the other thing is it is blatantly obvious, there is an operating company here that can help at least to fund this rather than leave town and you suddenly think 'hey' let's think about a mural.

Rod Doherty: The company still exists.

Michael Ulph: Yes but you know what I mean. Get it done while the company is still here.

Colin Maybury: The mines left behind quite a bit of acid mine drainage and spoil, stuff like that. It's disgusting.

Michael Ulph: Not the memorial you'd prefer.

Colin Maybury: I'd like to mention too the new gateway mural has representation of the smelter. Two guys in futuristic suits are pouring molten aluminium. It's quite an impressive display.





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Richard Brown: That's the one near your place?

Colin Maybury: Maybe it could become Hydro's monument.

Rod Doherty: Rock and roll stars who are here. Other than Richard here who is a rock and roll star.

Arch Humphery: When people come to live here and you are changing the role of this sort of area you lose the sort of history of what it did, how much it did, how many people were involved, how many people died.

Rod Doherty: None.

Arch Humphery: You can have a complete story that doesn't take up too much money that goes on in perpetuity that people understand what it is all about rather than a lot of that being lost or in bits and pieces that somebody says 'Oh yeah that's somebody pouring aluminium.'

There was a monument in the garden or there was a walk. I think just something that is virtually the complete; "this was the aluminium industry of the hunter" and produced a hell of a lot of aluminium and employed an awful lot of people.

Once houses start getting built here it just disappears. I think it is a shame for all the people who are related to people who did work here. Did many people die?

Rod Doherty: None. No industrial deaths.

Arch Humphery: That's unbelievably good.

Bill Metcalf: We had a couple of bad accidents but no deaths.

Colin Maybury: There were lung diseases, quite a few, and the people were paid to not promulgate it.

Bill Metcalf: Who was that?

Colin Maybury: Sorry?

Bill Metcalf: I don't know of anyone.

Colin Maybury: I know one who told me.

Rod Doherty: One out of about 7,000 or 10,000 employees.

Colin Maybury: They made him sign a contract for 80,000 dollars not to spill the beans.

Arch Humphery: I thought the fluoride fixed up everybody's teeth.

Michael Ulph: Anyway I think we are getting slightly



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off track. Any advice or idea how we might...

Bill Metcalf: It's been put out there for thought that is the main thing.

Michael Ulph: That's right. We have placed a few ads in the paper to talk about it. We haven't had a great deal of response at this point in time. We can do same thing again. We could go to the media and talk to them. Take to the wider community. If anyone around the table has any suggestions speak now.

Bill Metcalf: I'd like to think about this.

Richard Brown: I think that maybe a direct request to you guys. Call on your networks.

Rod Doherty: I forgot to bring it but I have a photograph of a structure. It was definitely 1970's, 71 because the cars are 1970-71 models in the photographs.

Bill Metcalf: Might fit in with my cycleway.

Rod Doherty: Sorry?

Michael Ulph: The memorial cycleway?

Rod Doherty: No it was a large aluminium structure and it had a big aluminium plate in the centre of it which had a map of the area. But that structure's [disappeared], that's the thing, that's what happens with things too. Along comes a councillor 'we don't want that structure in that park any more' and bang, it's gone. Wouldn't have a clue where it has gone but it was a fantastic piece of architecture. I don't know where it was. But to me it looks like it was in Rotary Park at some stage in Kurri Kurri.

It would have been around the time of opening the smelter wouldn't it?

Kerry McNaughton: 69-70 yes.

Bill Metcalf: What was it Rod?

Rod Doherty: A very large aluminium structure with an etched map on an aluminium sheet. I forgot to bring it tonight; I was going to show you.

Kerry McNaughton: I can't place it.

Rod Doherty: It was definitely in a park and there were cars parked on either side of it which gives me the indication that it was Rotary Park. Before Rotary Park was widened.

Mark Roser: Richard at this stage is there any plan to reuse any of the master buildings or are they all planned to go? Could there be reused for



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something?

Richard Brown: We don't have any specific plans. I think, as we will touch on right now, in terms of the demolition plans, what we will be applying to do will be to demolish everything essentially, eventually.

But what we will actually do is probably different to that, it won't be based on any heritage requirements or anything like that. It's more a case of if someone sees a need or a use for the building that's all.

Mark Roser: You could reuse the building for another use.

Richard Brown: Yes.

Mark Roser: Industrial use?

Richard Brown: Yes. That would be ideal. If there were someone come along and go 'look we have got a business opportunity and we need a building that looks like that one.'

Rod Doherty: You've got a squash court.

Richard Brown: Yes we do actually. I think ultimately that's what will happen but in the short term we have to plan that that doesn't happen and get approval to do something else.

Michael Ulph: Alright. Anything further on that before we move on? We will move on to Shaun. Shaun is going to talk about demolition DA and the statement of environmental effects for stage one demolition.

Demolition DA – Statement of Environmental Effects

Shaun Taylor: Stage one demolition.

Michael Ulph: I guess the difference is important.

Shaun Taylor: Yes. So I will define here in words and then we will have some pictures as well to describe exactly what we are calling stage one.

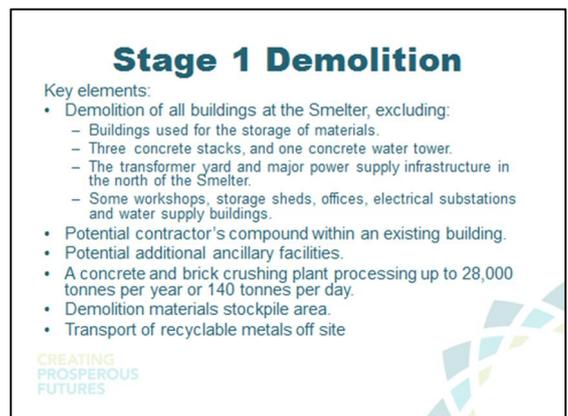
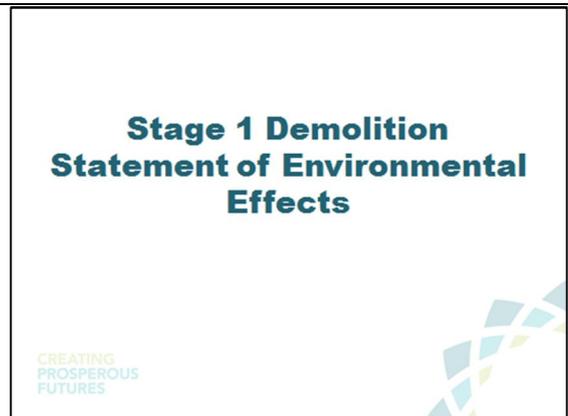
Stage one is actually the bulk of the smelter. Excluding a few elements, the storage sheds for the spent pot lining and other materials. They will be excluded from this stage. Probably the most visually significant is the three stacks and the water tower. They will be requiring explosives to be demolished so we will be leaving those to a later stage.

The transformer yard and the major power supply infrastructure. At this stage, still resolving the long term requirements and management of that area. Once we have resolved that, we can think about that. There are various workshop storage sheds and electrical substations and water supply buildings that will be saved. A: because they partly still provide a service and a purpose here on site and also, as Richard touched on, some buildings may provide a long term purpose. I guess we will wait and see about that.

To service the demolition contractors there will be a contractor’s compound on site. Currently we have nominated two potential areas. There is the pot rebuild building that you drive past on the western side of the road. We have identified as a potential compound but also the car park and the sporting fields are another area where there could be temporary offices and contractor facilities there as well.

There is also a concrete and building brick crushing plant that will be set up to deal with quite a large amount concrete that’s generated through the demolition. Associated with that there will be a material stockpile area both for short term and long term. Short term for the scrap metal which will be taken off site and longer term will be managing the concrete and brick which we will be looking to reuse on site in the future.

So hopefully the colours and labels make it fairly clear. The purple area is describing generally the stage one demolition area. There may be buildings within that purple area that will not be demolished, but that’s the nominated working area. As you will see there’s the three red dots,



four red dots sorry. Three on the left hand side of the stacks are to be excluded and there is also the large concrete water tower. It's nominated the bottom south west corner as the location of the crushing plant. Given the nature of the site and works it may have multiple locations. That's the initial location, also an initial material stockpiling area. As the demolition continues we will end up having a much larger stockpile area, both for this stage and keeping in mind the stage two demolitions and other works that are going on at the site.

Once the pot rooms and the associated buildings come down. We will be only demolishing to ground level in stage one. That will provide us a large stockpile area for storage of various materials.

So the first stage of activity is the site establishment. Prior to doing any work there is a whole lot of the documentation that we need to produce.

Obviously the key one is the demolition strategy.

So exactly how we are going to do this demolition. We are already building up a relationship with the likes of WorkCover, EPA and others who'd have an interest in demolition to make sure it is done both safely and in an environmentally appropriate manner and then as part of that there will be the work health safety management plan, and environmental management plan.

As Andrew touched on we are already well under way with removal of hazardous material such as asbestos and synthetic mineral fibres. One activity that we are also doing from a dust control, air quality perspective is removing accessible fines and dust from buildings, very fine such as alumina and others that have built up inside the buildings over the years. Where it is safe and viable to do so we will get that dust so it is one less dust source to get to and worry about when we bring the buildings down.

Michael Ulph: So some large vacuum cleaner sort of arrangement?

Shaun Taylor: Well we will be looking to contractors for an innovative idea. Obviously that is one likely method. If somebody comes up with a better way we will be happy to hear it.

Brad Wood: How far are you going with that? Cherry pickers and stuff like that to get up?

Shaun Taylor: Like I said, it's going to be... I



Site Establishment

- Demolition Management Documentation (Demolition Strategy, WHSMP, EMP)
- Removal of hazardous materials
- Removal of accessible fines and dust from buildings
- Demolition contractor's compound and equipment delivery
- Installation of environmental, safety and traffic controls
- Establish initial stockpile area and crushing plant



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guess when we look at the generation of dust and the impacts that may come from that as opposed to water suppression to suppress the dust. Where's the point, how far do we go in terms of what is viable. There are a lot of nooks and crannies where it is going to be quite hard to get to and it may be that primarily if it is safe to do so from ground level or on one of the platforms higher up. That's what we'd do.

Richard Brown: I think we are going to know Brad where there are likely accumulations. Like in ducts and various things and we will probably try and pull that out before it gets knocked over. We have got roof purlins and stuff but I don't know if we will be able to get up and vacuum down purlins and various things.

Where we have known concentrations that's where it is reasonable to do so.

Shaun Taylor: That's right.

Rod Doherty: Wouldn't most of those big purlins and things be actually disassembled? They won't be just knocked over with a crane?

Richard Brown: I don't know. I am assuming it would be knocked over.

Rod Doherty: What, using a wrecking ball?

Andrew Walker: No, there would be a big machine. A big excavator, some of them are up to 260 tonnes with grabs and shears. They just munch the steel, put it to the side and just munch it up.

Colin Maybury: Shaun, the collapsing of the main stack that should be a very interesting sight. Are you going to sell tickets?

Rod Doherty: I wonder if I'll still be alive.

Shaun Taylor: Well I guess we have got a bit of time until that is going to happen. I think that will be...

Bill Metcalf: That will be last wouldn't it?

Shaun Taylor: It's in stage two. It's tied in with the larger project so the timing of that is I guess a bit to be confirmed. Hopefully within a few years, there is a whole lot of planning obviously before anything can happen.

Richard Brown: Your point is well-made though Col. I think it is such an iconic thing that we are not going to stop people from wanting to see it so we are just going to have to control it essentially.

Colin Maybury: Of course.



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Shaun Taylor: That's just one thing we are well aware of, the balance of the community interest versus safety.

Colin Maybury: Will you clean it beforehand? Must have a lot of fluoride inside it?

Richard Brown: Surprisingly not. I don't think.

Colin Maybury: The updraft cleaned it out?

Richard Brown: Yes you are probably right. There are issues in and around the ducts feeding it. The horizontal stuff, where you can get fall out of particular material but nothing in the vertical.

Shaun Taylor: Just continuing on with the site establishment. Obviously at the start there will be a lot of activity going on with the delivery of the various machinery and equipment and establishing the contractor's compound.

One of the early activities will be the instillation, establishment of those environmental, traffic and safety controls. That will include erosion and sediment controls as well as dust being a problem for air and potentially a problem for water quality making sure there is adequate water supply for dust suppression.

Signage and fencing and the like to separate the demolition area from the remainder of the site. All something that we will be doing early on.

We sort of just touched on that. So the demolition activities, one of the key points to make clear is that it will be done by an appropriately qualified licenced demolition contractor. The tender process for that safety and previous performance I guess will be a key point in that tender evaluation.

Richard Brown: Not that I can say with certainty but our strategy at the moment, and thinking is that we will engage the demolition contractor and they will become the principle contactor on site.

So we will effectively hand the site over to them, it will become their site. We will no longer be welcome. No not really. But we will no longer be owners of the site. So that's a lease or some kind of arrangement where they fence it off and that is their work area. They become responsible for all the activities.

Michael Ulph: And you will withdraw to some office somewhere? Or the back office?

Richard Brown: That is what we are kind of already planning. Sort of withdrawing off site so we have got the site clean and clear. But also

part of this issue around power supply. So we have got the site isolated from a service point of view. There is no gas, there is no electrical supplies. We have to find electrical supplies for where we do congregate, but that has to come from a different source than from where it comes from. Effectively the demo contractor has got a clear run.

Shaun Taylor: As we touched on. A number of the buildings that will be demolished by the produced collapse.

Andrew Walker: So that involves bird mouting columns, notching the base of the columns and pulling the structure over. With an excavator with a steel cable. It drops it to the ground and machines can just sheer it all up into small pieces, load it onto trucks and take it off site for scrap.

Shaun Taylor: Those two should probably be in the reverse order. As Andrew touched on there is some things like asbestos and other hazardous materials that we probably won't be able to get to un till some demolition work is underway for safety reasons and the like.

We have a register on site of those hazardous materials. So we know where they are. Andrew and the team have done some extensive research of old building drawings and the like to find asbestos and records of asbestos where it's just not viable but it is below layers of concrete and the like. There are those items that we can plan and manage.

Concrete structures are induced collapse. Or systematic dismantling if it is deemed unsafe to do through induced collapse.

Steel structures are basically sectional removal. As Andrew talked about there will be a combination of options for that. Largely with scrap metal retrieval in mind.

Separation of concrete and metals where required there will be an excavator with a sheerer and hammer pulveriser attachment on it.

Then the stockpiling. Those materials obviously, will be taken to that stockpile area. Stored in there, in the screening areas and appropriately managed. Obviously metal is not going to be too much of an issue from a water quality or dust perspective but the concrete and the brick will be.

There will be dust controls, water quality management and appropriate safety as well.

Demolition

- Preparatory works for induced collapse
- Removal of previously inaccessible hazardous materials
- Concrete structures: induced collapse or systematic dismantling
- Steel structures: sectional removal/ systematic dismantling
- Separation of concrete and metals
- Stockpiling of demolition material
- Environmental and safety controls

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As I said earlier there will be a crushing plant that will be set up to crush up to 140 tonnes per day or 28,000 tonnes per year. That crushed material will be stockpiled for future use on site be it on haul roads, filling the voids like Richard touched on earlier. There are a number of opportunities for use on site. So there are no plans for any of that material to be taken off site. There is an estimation of about 15 to 20 thousand tonnes of various metals on site. All that will be made available for processing and recycling.

We are looking at about, up to 20 truck movements a day, given where we are in the program. Then again environmental and safety controls will be part of all that.

Environmental management.

I have listed there the key issues associated with the project. We have been having discussions with Cessnock Council's planning staff since the end of last year about stage one demolition. What they identified as the key issues for us to consider in any DA. The top two on that list, traffic access and air quality are actually probably were identified as the key issues.

The traffic impact assessment was undertaken. Looking at what is the existing traffic on hard roads. There were some traffic counts undertaken. That looked at what are the activities that are going to be on site, what is the traffic that is going to be generated and how will that impact on those traffic numbers. We are looking at a maximum of 54 vehicles per day with 20 of those being truck movements, majority of those will be small vehicles. The next point there is the key issue when it comes to traffic, 85% of the traffic will actually turning off onto the expressway, continuing south towards Newcastle or going south and then doing a U-turn at the Kurri interchange to go north to Braxton and beyond if required.

The modelling has shown it will have a minimal impact on the performance of that interchange. There is what they call a Level of Service. It currently has a Level of Service of 'A' and it remains the Level of Service of 'A'. So there is going to be minimal impact on how long vehicles are going to have to wait.

Rod Doherty: I don't know why we are going through that kind of stuff. I know you have got to do it but that interchange was designed for an operating smelter.

Shaun Taylor: That's the thing we are aware of.

Demolition Materials Management

- Concrete and brick crushing plant: up to 140 tonnes per day/ 28,000 tonnes per year
Crushed material stockpiled on site for future use.
- 15,000 to 20,000 tonnes of ferrous (steel) and non-ferrous (predominantly aluminium and copper).
Processed, sorted and sized before transporting for recycling: up to 20 truck movements per day.
- Environmental and safety controls

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Environmental Management

- Traffic and Access
- Air Quality
- Noise and Vibration
- Soil and Water
- Heritage
- Flora and Fauna
- Waste
- Visual Amenity

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Traffic and Access

- Traffic Impact Assessment undertaken.
- Maximum number of vehicles: 54 vehicles per day (up to 20 truck movements, remaining small vehicles).
- 85% of traffic predicted to use the Hart Road interchange/ Hunter Expressway, remaining 15% to Weston/ Kurri Kurri
- Proposal traffic would have minimal impact on local traffic
- Traffic Management Plan to be prepared prior to commencing the Proposal.

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There is a concern I guess that even the changes of the express way that Hart road has become busier. That's why there is a concern about the impact that the traffic would have. Fifty four vehicles per day on that road is going to have a minimal impact.

Bill Metcalf: That's going to be less than the operating smelter.

Shaun Taylor: A lot less.

To the point, its where, the only other real intersection we are worried about is out here on Dixon Road and if there's an event on at the speedway they are usually on a Saturday afternoon or evening. There's going to be very little traffic coming out of the site. Even if there was, it's not going to impact, that speedway was there when there was a lot more traffic.

We have got that managed. But in any event a traffic management plan will be in place for that.

Air quality for the obvious reasons. It is a key issue with dust generation during the demolition with the crushing plant and the vehicle movements. We have a fair distance to the nearest receiver. It is 420 metres. The combination of the actual distance itself but the way demolition will be done and all the management measures that are built into that procedure show that air quality and dust generation is going to have a minimal impact.

An air quality management plan will be developed and implemented. They key elements of that include site the personnel induction. They guys working on site doing the demolition will know what they need to do and the importance of dust control. There will be dust generation avoidance, so avoiding producing dust in the first place. We don't want those accumulated dusts that we talked about. Stabilising demolished services once the buildings are down, so we are not generating dust from those.

Dust suppression. The key method is watering down the surfaces if we see that dust is being generated, get the water carts out. On the crushing plant and alike.

Inspections and monitoring. Is the easier one, go out and do an inspection. If you see dust being generated we will have to think about how we will do things differently.

We are also proposing setting up a monitoring station network to build on the work that Hydro has already been doing in terms of air quality

Air Quality

- Air Quality Impact Assessment undertaken
- Key issue: dust generation (demolition, crushing and vehicle movements)
- Distance to nearest sensitive receiver (420 metres) and demolition methodology would minimise air quality impacts
- Air Quality Management Plan to be prepared prior to commencing the Proposal:
 - Site Personnel induction
 - Dust generation avoidance (e.g. removal of accumulated dusts prior to demolition; stabilisation post-demolition)
 - Dust suppression (e.g. watering)
 - Inspections and monitoring (e.g. visual and monitoring stations).

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monitoring.

Noise and vibration. Obviously, demolition, the vehicle movements and the like are going to create some noise.

An impact assessment was undertaken. We looked at the existing noise and we set up a number of noise loggers around the surrounding area. Built up the existing noise model, put those activities into the model and looked at the worst case scenario in terms of the maximum activity that is occurring on site. In the places closest to residential areas.

What the modelling showed is that the work would comply with the EPA's construction noise guideline. Noise levels for day time construction work. There's also to the point that, for whatever reason, if daytime construction hours are typically 7am to 6pm Monday to Friday and 8am to 1pm on a Saturday.

Modelling shows that only a small reduction in activity on the site, if for whatever reason activity did have to occur beyond those hours, again it would comply with EPA requirements.

The noise and vibration management plan will again be implemented to make sure that the contractors know what they need to do to make sure that we do comply with those noise levels.

A key part will be a stakeholder engagement plan. Part of that will be that residents will have a number they can call if there is noise or dust. They can call and that would start up a process for making an enquiry as to what was the source of that noise, potentially undertake some noise monitoring and then there will be a response as to how the activity is done to remove or reduce noise source.

Soil and water, we have a key issue there with water quality and sediment loss on this site. As I said, there will be a number of sources of material that could impact on water quality. Getting around and making sure we have the appropriate management measures in place.

Erosion sediment controls. If there are contaminated materials, making sure again we are controlling the run off of certain materials. Appropriate fuel storage, chemical storage and management on site that it is in accordance with the EPA requirements in terms of funding and the like.

And then maintaining the existing water management system. So the smelter has an

Noise and Vibration

- Noise and Vibration Impact Assessment undertaken
- Key Issue: Noise generation (demolition, crushing and vehicle movements)
- Noise modelling indicates that proposed methodology would not exceed EPA noise criteria
- Noise and Vibration Management Plan to be prepared prior to commencing the Proposal:
 - Stakeholder Engagement Plan
 - Site Personnel induction
 - Noise controls
 - Activity management

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Soil and Water

- Key issue: need to protect water quality and sediment loss
- Soil and Water Management Plan to be prepared prior to commencing the Proposal:
 - Site Personnel induction
 - Erosion and sediment controls
 - Contaminated materials management
 - Chemical and fuels storage and management
 - Maintain existing water management system

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existing drainage system and the dams for the treatment of water. They will be continued to operate to further protect the receiving waters, in Swamp Creek and beyond.

Heritage. We just touched on heritage or the history of this site. The thing to note is that from a non-indigenous heritage perspective because of the relative recent history of the site that the buildings are not deemed as heritage items. That's not to say they don't have social importance or a written history of significance. But they are not classified as a heritage item. Similarly, as most of you would expect, the smelter site itself has no Aboriginal heritage and is highly unlikely it would be countering any within the smelter.

We have already touched on how that history of this site is going to be remembered and acknowledged. So that is something that will be addressed.

Flora and fauna. It's much the same as heritage. We are staying within the fenced smelter site. No areas of ecological significance that are going to be disturbed by stage one demolition.

Waste. We have already touched on it. There is a lot of material that is going to be generated. The bulk of the material that is going to be generated by stage one demolition will be recycled and reused either on site, as I said with the concreted brick or the scrap metal taken for recycling. Other non-recyclable reuse material will either be transported to a licenced waste management facility or temporarily stored on site for future management within the containment cell as part of stage two.

Energy. Again, something we have just touched on, there is a lot of fuel and electricity that will be used. We will have an energy efficient management plan to make sure we are using the fuel and electricity efficiently.

Visual amenity. Along with the history of the site, it is a visually significant part of the landscape in this area and we do acknowledge that. I guess, probably it's going to be neutral or even a positive impact on the local community. Some people would know, or do have some significant for this site, but also know, going forward that we can't maintain that visual environment.

The other thing that I guess is good to note. This site is visible from a lot of areas. That's almost part of the community policing of the work we are doing on site. It is a visible site. So we will have

Heritage

- No registered items of Aboriginal heritage or non-indigenous heritage to be impacted.
- Due to significance disturbance, highly unlikely unknown Aboriginal heritage to be impacted.
- Photographs and drawings of the Smelter would be made available to interested historical societies or community groups.
- History of the Smelter to be acknowledged (as discussed)

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Flora & Fauna

- No areas of ecological significance to be impacted: Proposal activities restricted to the fenced Smelter site

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Waste

- Majority of demolition waste (concrete, bricks and metals) to be reused on site or transported for off site recycling
- Non-recyclable/ reusable wastes to be transported to a licensed waste management facility or stored on site for future placement in the containment cell.
- Waste Management Plan to be prepared prior to commencing the Proposal.

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Energy

- Various uses of fuel and electricity throughout the Proposal site and demolition program
- An Energy Efficiency Management Plan to be prepared prior to commencing the Proposal.

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to perform for that reason alone.

The process from here. So as Andrew touched on, we have a DA statement of environmental effects to be submitted to Cessnock City Council. The documents for that are close to being finalised. I envisage that happening, probably within the next fortnight. Get a quantity surveyor sorted out with that. Once it's submitted to council and council are happy with the documentation provided we will then go on exhibition for a minimum of 28 days, as most of you are aware, that's your further opportunity to comment on the project. Then Council and Hydro will consider those submissions.

The other bit that is part of that approval process is that it is an integrated development. We have had discussions with the EPA on this project, on stage one demolition. A lot of that monitoring and management that we just talked about, is what they see would probably be reflected as advised by environmental protection agencies.

There we are.

Michael Ulph: Wow that is lots of information Shaun, thank you for that, putting that together and explaining all of that.

Colin Maybury: Can I just ask a couple of questions of Shaun. Shaun, the noise level, is that the parameter on the perimeter of 65db. Is that what you are aiming at?

Shaun Taylor: Under the Interim Construction Noise Guidelines under 65 [decibels during] day time, 60 [decibels at] night time at the exterior of the house, I think 1.5 metres high.

Michael Ulph: That's right.

Colin Maybury: Are you dust testing over at Yawarra? Why is ask this, I had a look at some figures that you put over the years and Yawarra is four and a half times the average of other sensors.

Kerry McNaughton: Yes Col with the Yawarra site I have maintained that all the way through.

Colin Maybury: So you have been looking at that?

Kerry McNaughton: Yes.

Colin Maybury: Have you been testing both fluoride and dust?

Kerry McNaughton: Particularly fluoride and gaseous fluoride yes.

Visual Amenity

- Smelter is visible from throughout the surrounding area
- Demolition activities potentially visible
- Change to the visual landscape considered a neutral or positive impact
- Key visual elements (the stacks) would not be demolished in Stage 1 Demolition.

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Process from Here

- Development Application and Statement of Environmental Effects to be submitted to Cessnock City Council
- DA and SEE placed on exhibition for a minimum of 28 days: opportunity for comment
- Integrated development: EPA to consider need to amend Hydro Environment Protection Licence
- Council review and determination

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Shaun Taylor: So, as I touched on, we are looking to expand on the existing monitoring network. The locations, the specific parameters that the stations will be monitoring; is something we will be working on with the likes of the EPA and council.

Michael Ulph: So that's additional monitoring locations just for the demolition period?

Shaun Taylor: Yes.

Colin Maybury: What I was going to say. You said that one you will measure particularly at is 420 metres away. Yawarra is nearly a kilometre. What I am saying is, it is 4.5 times the average pick up of the others, the other sensors.

Shaun Taylor: Yes well what I said is that the nearest residence is 420 metres away. Again, as I said the locations for any additional monitoring are something we need to work out, and take into consideration the prevailing wind directions, where is a high density of residents. I guess that program, as I said would be an air quality management plan will be developed. That monitoring will form part of the management plan. That will include those actual locations.

Colin Maybury: Well no-one knows it better than this man beside me.

Michael Ulph: Good thing they kept you on mate.

Kerry McNaughton: Yeah mate, what can I say?

Michael Ulph: Any other questions around the DA and the SEE? Comments?

Alright well thank you very much Shaun.

Questions and Answers from the CRG

Michael Ulph: That brings us to the next and final part, which is the questions and answers from the CRG. So just to reiterate, you are out in the community, you are representing the community when you come here as a conduit between this project and the wider community, so if you have had people ask questions to bring along to the meeting, now is the time. Or anything that you brought up yourself.

Colin Maybury: I have come up with an interesting one.

There's very little on the net, there was a horrendous explosion in a place called La Baie in Quebec, in Canada, where the spent pot lining was being put into a ship and it exploded. It killed



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two men on the ship and wounded eight others around it and caused 30 million dollars' worth of damage. I wonder whether that is part and parcel of the fact I spoke to one of the senior waste handlers at the EPA and he said to me, we will not allow them to take that off site?

And the impression gained from what happened and experience at La Baie, was the fact it was handling, it was dampened and gave off volatile gases which exploded. Now if you go down and look at the sheds [on site at Kurri], down there that we went through in the inspection, and I have got photographs of them here, they are heavily protected from lightning strikes.

They have very very large vents. The vents on the roof are at least four times the normal venting material that they have for venting process in industrial plants, according to my experience.

So, what you were saying, you, I say this as the smelter. What you were saying when you built those sheds, that you were very worried about the amount of volatile gases that were given off. Flammable gases that were given off. So the flammable gas is there, when it is stirred up by shifting, obviously you are going to get more gas put off and the La Baie experience shows that.

La Baie, even when men were killed and people were wounded and there was 30 million dollar worth of damage, the main aim of the set up was to minimise the effect on the reputation of [company in Quebec] at the time. Their public relations officers went to great lengths to try and convince people of La Baie, a town of some 24,000 people, about the size of Cessnock that their handling capabilities were quite correct.

However, they weren't quite correct because of the damage that occurred.

Michael Ulph: Sounds terrible. Ok so I guess there are a few statements in there.

The lightning rods around the site. How many lightning rods have you got on the buildings?

Colin Maybury: About thirty on each one.

Richard Brown: None.

Michael Ulph: None?

Richard Brown: They are not lightning rods Col.

Colin Maybury: What are they?

Richard Brown: They are actually posts for the handrails for the construction of the sheds.



Colin Maybury: So no lightning rods at all?

Richard Brown: Not on the sheds.

Michael Ulph: Ok thank you. The next one was about gas when shifting SPL. Does gas generate when you move SPL around?

Richard Brown: Well, I am not aware of it. My understanding is that it requires moisture or water to generate the gas. So simply by moving it, that is not our experience.

Colin Maybury: But the humidity is part of it.

Richard Brown: Again, it's not something we have noticed. Your comment about the accident in Canada. I know about this accident.

My understanding is that's what's sparked the fact that aluminium smelting by products are considered a dangerous good. It's a listed dangerous good, it's under Dangerous Good Code 4.3. It's that incident that then sparked that development of those listings for those codes.

It's a UN standard so all spent pot lining that is transported all over the world is considered a dangerous good and it has to be handled under certain protocols as a result.

Michael Ulph: So this happened a while ago then?

Colin Maybury: 1990.

Michael Ulph: 1990? Ok twenty five years ago.

Rod Doherty: Can I ask a question?

Michael Ulph: Sorry I just want to get through, there is just another couple of points.

There is one about aerating? Having vents in the buildings.

Richard Brown: Ventilating. That's probably true what Col said. In terms of, if there are some risks of gas generation then the buildings are ventilated to make sure there is not a build-up of gas. That's the same reason those dangerous goods codes specify a particular type of containers for spent pot lining to be transported in. They are ventilated containers. So it is the, essentially it is not the fact it is producing the gas, it is the fact it gets contained.

Colin Maybury: The next question I'd like to ask.

Michael Ulph: Sorry, I might just give you a break for a second. Rod wanted to have a go.

Rod Doherty: I was just going to ask. The



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smelter people. My research on SPL shows lots and lots of methods of disposal and storage and recycling. One of those, over the years was that a lot of this stuff was actually being transported to Italy. So how many ships have exploded taking it to Italy to be dumped?

Richard Brown: Well, none that I am aware of. Part of that would probably be because the methods being used for transport consider that risk. So that they are transported using the BK2, they are called, special containers that are ventilated. That's a requirement so you don't get a build-up of flammable gas.

As a result I am not aware of incidents that occur.

Shaun Taylor: It's probably worth noting as well that it's a material that because it's under the Australian Dangerous Goods Code that there are a number of permits or approvals that are required to be able to export that material as well. A lot has changed in twenty five years.

Rod Doherty: There has been export from Australia in the past.

Shaun Taylor: There has been in the past.

Richard Brown: 100,000 tonnes plus has been exported from Australia.

Shaun Taylor: That's part of the reason we are aware of what has been approved is there are licences that have been approved by the Federal Government for that. Because of the nature of the material we have to get approval to do that. It's quite an onerous process to go through.

Michael Ulph: Ok. Col you had another question?

Colin Maybury: Yes, the point was where it is now, it's surrounded by a fence, and it's patrolled. Why can't it stay as it is in the sheds?

Richard Brown: It is one of the possibilities that we have considered. It is an option to do nothing. We had talked about that last week, to do nothing.

Colin Maybury: One of the reasons I have been very cranky on this committee is the fact when I asked, was it going to be put into the ground, I got no answer. The second meeting that we had, we came up with that fact we were going to bury it. That's it. There was no consideration.

Richard Brown: Well, what we talked about was that our proposal, that we believe to be the most reasonable and feasible. We went through that at



some length at a number of meetings is to contain that material. That is what our proposal is.

However, The purpose of engaging with the community and all our stakeholders is to get feedback, to understand the concerns and the issues. Those concerns and issues are things we need to acknowledge and build into our proposal. So that is part of this process.

We have come together, we have made an assessment. We have prepared what we believe to be the most reasonable and feasible. For a whole range of reasons which we have explained at length and we are getting input on that now.

Michael Ulph: I guess the point I'd like to make is that the environmental impact statement for this proposal is still being developed and that the formal consultation period happens when that environmental impact statement goes on exhibition. It is put on exhibition but the Department of Planning. That's likely to be a long way down the track. Hydro has got in quite early and is consulting quite widely during that development, and above and beyond the usual sort of expectation in developing one of these things. I see some nodding.

Bill Metcalfe: All the talk I had with people is that Pasminco has had an impact on this place. What happened down there and if you put SPL in the ground most people think that's not the key solution to get rid of it. That's what people tell me and jobs were the other thing. Those were the two comments in discussion with people. I said it is not a contaminated site but people argue about that.

Michael Ulph: Alright.

Colin Maybury: That's another thing. If in a future time it becomes worthwhile or it becomes economic to treat it. The plant is already there. It would employ other people to do that treatment on that plant.

Just fence it off, have it patrolled and it is the cheapest possible.

Michael Ulph: To leave it in the sheds as it sits?

Colin Maybury: To leave it in the sheds. The latest thing that I have seen on the internet is one large stockpile of SPL in the U.S. has been put into a sort of rubberised balloon.

Michael Ulph: I think you mentioned that last time.



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Colin Maybury: A gigantic sized thing, it covers acres and acres and it has been put in there. The reason they say, and on a concrete slab I presume. The reason is they can actually see if anything occurs to it, if any water gets in, any damage occurs to it, if it starts trickling out.

Michael Ulph: Is it a transparent balloon?

Richard Brown: Col, are you able to share that reference?

Colin Maybury: Sorry?

Richard Brown: Can you circulate or send the reference to that material? Because I have not seen or heard that.

ACTION: Col Maybury to provide the link to the rubber balloon project.

Colin Maybury: As I went through it, one of the things I find on the internet is that there are very few logical or honest appraisals of SPL.

Most of it is garbage where they say 'we are going to build a treatment plant, we are going to do this, we are going to do something.' Alcan for example in Quebec had a 120 million dollar plant on the drawing board and up for appraisal when suddenly they just pulled it out. This is happening all over the place, trying to get away from treating this SPL because it is fairly costly to treat.

Michael Ulph: Yes it is challenging, I think Richard mentioned that last month.

Colin Maybury: What I am saying is, in the sheds is probably the safest method that you can use because it is visible in the sheds, you can actually see it, if there is any water coming through the roof or trickling down the sides or whatever the case may be. In the ground, buried in the ground, it is not visible.

To say you will be testing and you will look after it forever is absolutely wrong. You and I know that any company only exists while ever it is economically worthwhile.

Shaun Taylor: I guess, just probably a couple of things to add to that. As Richard said one of the options is to keep it in the shed, fence it off. That's it.

Colin Maybury: Why weren't we provided the opportunity to talk about that in the first place?

Shaun Taylor: There are issues, I guess other than cost. There is a range of things that have been considered. For example, the implications it has for the long term redevelopment of this site, having a fenced off area of sheds with spent pot lining in it. What does that do for the opportunities



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on this site? Looking, while there is opportunities there is risks against it as well, as there are with every option that we have looked at.

Just on this project alone, we have gone through a number of years of looking at those opportunities. It is good to just see that you have experienced the same issues as we have by looking at all these opportunities, they are the 'golden goose' when it comes to SPL but most of them have fallen down be it the technology just hasn't proved itself, they tell you they can treat it and at the end it has to go into a containment cell as hazardous waste.

Colin Maybury: This can be treated though, the treatment plant is there and it's capable of being turned on and run tomorrow, and could be run for the next twenty years.

Richard Brown: Not that treatment plant there Col because that doesn't treat any spent pot lining.

Colin Maybury: That's not what [name] told me. [He] said it was exactly the same as the treatment plant down at Tomago and Tomago is running at the moment treating something like 24,000 tonnes a year.

Richard Brown: It's news to me.

Shaun Taylor: I guess that's the other element that we have had to look at as well, as you have used the word 'it could', it could do it.

One of the things we are having to look for in identifying opportunities is the certainty. Getting some certainty around the management of the spent pot lining and certainty around the future of the site.

At the moment there are opportunities there for treatment. But they are unknown as to their technical viability, their commercial viability. Because they are a commercial operation, they may not exist in 12 months' time. These are things we are having to look into in terms of a whole range of criteria we are considering when we are looking at spent pot lining management.

Colin Maybury: If you look at what Brett Turner says. It will fail; there is no doubt about it. There is a report here, 'Waste plans are flawed' out of the Newcastle Herald and the Senior Environmental Scientist in Newcastle.

Michael Ulph: This is the document that you tabled about five months ago I think. You mentioned a letter and I think it is in previous



minutes.

Colin Maybury: That one is not, as far as I know.

Michael Ulph: But it is based on the same paper isn't it?

Colin Maybury: No, not necessarily.

Shaun Taylor: Which waste plan did Professor Turner refer to?

Which was he referring to? Dr Turner sorry, not Professor.

Colin Maybury: I will table that to go into the minutes please.

Shaun Taylor: Was it specifically about the containment cell that we are proposing?

Colin Maybury: Yes. He says it will fail. It's got an 80% chance of failing within 100 years and 60% chance of failing within 30 years. And it's not common sense to put it in the ground.

Michael Ulph: It says 85% and 60%, yeah.

Richard Brown: Well I think that's, you know, part of the process we are going through is to evaluate things like that. As Andrew said, one of the things we are looking at is design for the cell. And it is not us, not him and I sitting here designing this, this is people that are experienced and have used the science that developed over the last 20-30 years. Through that research and through that science they are giving us assurances that you can design a cell that sufficiently meets and controls the risks that we are looking at.

Colin Maybury: It is a bomb that is being stored, and even if it stays dry, in 1000 years' time it's still there. Still highly toxic, still ready to go.

Shaun Taylor: I guess the issue we are dealing with in theory could be in those sheds in 1000 years' time as well.

Colin Maybury: Someone would treat it Shaun. The world is such a greedy place under capitalism. It must be treated.

Shaun Taylor: I guess unfortunately the international aluminium industry's experience for many years is that greed hasn't worked to find a viable solution to it as yet.

Bill Metcalfe: Before we get to this haven't we got to go through EPA first?

Richard Brown: Of course, the whole process has got to be assessed and approved.



Bill Metcalfe: I agree we wait and see what comes out of that.

Shaun Taylor: Ultimately, they are the gate keepers on this. We can put forward what we think is the best from a whole range of criteria, which could include putting [leaving] it in the shed. But the EPA may not be happy with that.

They are obviously an important part of this conversation.

Rod Doherty: I'd just like to make a comment on the demolition of this site and the reuse of this site. It's only an observation that BHP been [turned upside down] since 1999 and still nothing has actually happened there and I certainly wouldn't like to see this particular site sitting here in 20 years' time looking like the BHP site is today.

Kerry Hallett: It's actually a building site you can't use it has disintegrated so much.

Michael Ulph: At BHP?

Rod Doherty: At BHP.

Richard Brown: And I agree with that. Right from the outset, we talked about what Hydro's view of this process is. That is to try and provide opportunities for turning the site back into something that creates value for the community.

If that is jobs or conservation or residential development then so be it. We have got to do what we can to try and do that, and part of that process is setting the site up, rezoning it, doing the demolition, remediating the site, that's all fitting the enabling activities, doing that.

Colin Maybury: Do you mean to say Richard that leaving ten sheds down there in its own compound, and guarded or whatever the case may be, would affect the aesthetics of the site. No it wouldn't.

Richard Brown: I don't know.

Colin Maybury: Other than comparing it to a great big mound of Mount Hydro.

Richard Brown: I don't know if it is the aesthetics. It might be more the actual opportunities that that particular part of the site provides for further development. I don't know.

Colin Maybury: The danger is minimised down there because you have ten sheds. If one goes up it probably won't affect the others. In the cell it will go up, all together.



Richard Brown: I think in all reality, the likelihood of a spontaneous or induced explosion is next to nil.

Colin Maybury: That's what they said about La Baie.

Kerry Hallett: That was 25 years ago.

Colin Maybury: It doesn't matter. It's still volatile, highly volatile.

Kerry Hallett: Col you know as well as I do that people, I am not arguing either way, but I want you to think about what you are saying about the sheds. People move into an area, and think about the chicken sheds down at Cliftleigh, people moved into that area, it's all cool, we know the sheds are there. Not a drama. A few years down the track people are like ' I don't really want a shed there, its impacting on my property, I want that shed gone, let's start working on getting that shed gone.' Where does that leave people?

Colin Maybury: And we will. What I am saying to you is someone will come in.

Kerry Hallett: Someone may come in.

Colin Maybury: No not may.

Kerry Hallett: May come in.

Colin Maybury: There are two companies that are vying to do it at the moment.

In fact that's one thing I'd like to bring up. Can we have Garbis Simonian come and speak to us about treatment?

Richard Brown: Col I don't know that it adds a lot of value. We know what they offer, we know what Regain offers, we know what Weston offers.

Colin Maybury: You know. We don't.

Richard Brown: I think Toby has made it very clear. He has read out emails. You know it's nothing more then what is already being reported on.

Arch Humphery: Is the process, we are not here to define a process for something that is on the site. It doesn't matter what anybody says here, ultimately whether it's the EPA or whoever it is says, this is suitable, this is what we want you to do and we don't agree with what you are saying.

So to try to come to a conclusion with whether you keep it in the sheds or whether you bury it, they are suggestions that can be put forward. But then when it goes, it then goes on exhibition, then



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you can have your say as to what you consider the downfalls or the positives and somebody comes to a conclusion but you don't arrive at a conclusion here. You can have suggestions but not arriving at it.

Michael Ulph: Clearly Arch the EPA and the Department of Planning are the rezoner's and consent authority.

Mark you had a comment?

Mark Roser: Not trying to extend the conversation on the sheds. But has there been an audit on the integrity of the sheds? Maintenance that is required? On the slab? If there is SPL on the slab? They are things we need to be looking into if what Col is talking about is an option.

Richard Brown: We do have maintenance routines on site, for the equipment. I am not specifically aware of what the frequency of that routine is or inspections are, you know maintenance inspections that are done.

Rod Doherty: Would have to be done in the future?

Richard Brown: Yes of course. Any long term management option, whether it be a containment cell or sheds, you have to manage and maintain those in the future.

Michael Ulph: Alright, thank you.

Rod Doherty: I have just got a question on current security. This place has always been exposed to hooligans breaking in and stealing stuff. Is that an ongoing issue now or is it going to be an issue during the demolition period?

Richard Brown: Clearly that is an issue of consideration in the demolition period in particular. We haven't had too much in the way of security concerns. We had a little bit of an issue. When was that Kerry?

Kerry McNaughton: About 18 months ago there was a few things happening, potentially access to site. Still had the usual, access to the buffer zone, mainly cut fences, people getting fire wood etc. but in general we haven't had many issues recently.

Richard Brown: Touch wood, it has been pretty good on site. Clearly the demolition is another opportunity where people think now all of that copper that's been hidden away or tucked away is now exposed and it's available for my benefit. But we will maintain security on site during that



process, or the contractor will certainly contain security on site.

Michael Ulph: They'll have plant and machinery here they will want to protect.

Meeting close

Michael Ulph: Alright. Well if there is nothing else burning at the moment we might close the meeting and plan another date.

Third Thursday of the month for next month.

Thursday 20 August 2015.

Rod Doherty: I was going to ask the question, do these meetings into the future need to be monthly?

Richard Brown: No possibly not.

Michael Ulph: We can see. If there is nothing to talk about we can postpone.

Richard Brown: Can do it bi-monthly.

Rod Doherty: No use coming and sitting around the office when there is nothing to discuss.

Michael Ulph: There were some very pretty slides and video today though.

Alright thank you very much for your time.

Meeting closed: 7:23pm



Alexandra Parker

GHD – Stakeholder Engagement and Social Sustainability