

## Correnso Extension Project – Community Meeting

Thursday 15 September 2016

The following is a record of the Correnso Extension Project Community meeting held at 3.00pm on 15 September 2016. Where possible, we have tried to capture individual contributions at the meeting but these do not purport to be verbatim notes. Printed copies of these notes, and a compact disc (CD), for those who would like to listen to the actual discussion at the meeting, are available from the Waihi Visitor Information Centre, HDC Service Centre, and Oceana Gold office. An attendance list is appended to these notes.

Tim welcomed all and noted that it is 6 months since the last meeting. Tim also acknowledged that there is just one meeting being held today rather than two as has been the case in the past. The numbers last time were 14 at the 2.30pm meeting but only four at the 5.30pm meeting. Tim also said that writing up two sets of meeting minutes that are almost the same but not exactly is quite a technical business.

Graeme said: I have a bit of a problem in that the people who aren't here are probably in the workforce.

Kit said: It was actually my decision because when we were doing 5.30pm meeting (attendance) was going down and when we got to four people it seemed a remarkable expense to go to for four people. We set the meeting for 3pm because the afternoons have always traditionally been much more populated by people. When the 5.30pm meeting attendance got to four it just seemed that people were voting with their feet. People can always get the minutes and the CD so we figured that it was the way to go.

Graeme said: I think you're missing the participation, which is a shame.

Kit said: Let's have that conversation later then because if you want to push this to 5.30pm we'll do that but there's just no point in doing two. So if you want to push this one to 5.30pm let's talk about that.

Tim said: So we'll remember to come back to that when we talk about the process a bit later on. Tim reminded everyone that the meeting is being recorded and asked anyone with a question to provide their name first. Tim handed over to Kit for the first part of the agenda (project overview).

Kit introduced Danielle as a new addition to the community team. Danielle replaces Gael Hurley who has left having been with the team for 20+ years.

### Project overview

#### Purpose of meeting



Under Condition 62 of the Correnso consents we are required to hold community meetings every six months. The consent states that the purpose of the meeting is to:

- a) Present information from the preceding six months on the following:
  - i. A description of the mining activities provided for under this consent that have been undertaken;
  - ii. A summary of relevant environmental results;
  - iii. Progress with the IRP property purchase programme;
  - iv. Progress on any matters raised at the preceding meeting;
- b) Receive feedback from the meeting attendees on the consent holder's activities and progress on the matters listed above.

Kit said: This slide is to remind us of the reason we're here (at this meeting), to provide a description of what we're doing, a summary of the environmental results and progress with the IRP. Regarding matters raised at



the preceding meeting, I had a read through the minutes from the last meeting and I think we answered all those. If you've got something that we didn't reply to please make sure that we check in with that.

## Outline



### ► PROJECT

Martha open pit | Pit Rim Walkway | Correnso | Near mine exploration

### ► SOCIAL/COMMUNITY

Communication | AEP | IRP | SIMP

### ► ENVIRONMENT

Dewatering & Settlement management | Vibration management

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Kit continued: Today, we will talk to you about these things. If at any stage it doesn't make sense or you've got a question feel free to interrupt, this is not a lecture. If you get to the stage where you don't understand something or need more clarification, if we've got an answer for you we will help.

## Martha open pit



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Martha Open Pit – You will have been up there and seen it. It's not the greatest sight in the world and for us it's remarkably embarrassing that it's sitting there looking like that. You're probably wondering what are we doing with it. The answer is, "Not much" in terms of physical but an awful lot behind the scenes. We're collating a whole range of technical reports, and trying to figure out the best way of dealing with it. There will not be a quick answer, it's going to take quite a while for us to figure out what is happening. This picture (on the slide), is a little bit out of date now because it changes on a regular basis. What you're probably not aware of, unless you've been round Bulltown Road, is that we have taken away the topsoil stock pile that has been there for many years (in some places about 6m deep and in other cases a bit more). We wanted to get down to the base rock here to see what was happening with the rock.

Tim said: Kit before you move on from there, is it safe?



Kit said: When it fell on 26 April, at 4.40am, we knew it was going to and we told people on social media that it was probably going to drop on Anzac Day. We were only 4.5 to 5 hours out. You will remember we changed the route of the pit rim walkway and my words to you were, "Because we don't want you to be upset when the rock falls". If you had been on the pit rim walkway when it happened you would have been more than upset, we lost a bit of the pit rim walkway up the top here. It was safe because of what we did (warning people and closing that part of the walkway). Is it safe now? Yes and here's why. First of all from the workforce perspective we didn't have any staff in there and we hadn't had for quite some time. Is it safe from the community's point of view? Yes because we're re-routed the pit rim walkway and for those of you who don't know I'll show you a map.

## Pit Rim Walkway



### PIT RIM WALKWAY DETOUR

Due to the rock fall on the north wall of the Martha open pit a section of the Pit Rim Walkway has been rerouted along Savage Road and Cambridge Road.

All other sections of the walkway are open to the public.

We apologise for any inconvenience.

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Also we purchased a couple of houses down here (in the area between the pit and the adjusted walkway). That has nothing to do with safety, we were putting bulldozers up here, and you know what the reversing beepers are like on bulldozers and trucks. We asked both, "Do you want to stay?" They said, "No we'll sell our house". So we bought them.

It is safe, the pit rim walkway goes down here at the present time. We are still not sure what happens from here. It is a mess and we are embarrassed about it and we are going to clean it up somehow. We are figuring that out.

The text on the slide above is a copy of the sign that is at each end of the pit rim walkway and in various other places too.

We initially moved the pit rim walkway down and into Pitt Street, but we found that for some reason, people got to the top of Pitt Street and decided they were going onto this (private) property here so now we've had to put it all the way down Savage Road and Cambridge Road. We had signs here that said, "Private property, please do not enter" and the signs got stolen. We had signs here that said, "Pit rim walkway this way" and they got pinched and thrown into the bush. So we gave up and unfortunately we're now doing this. The down side to that is it used to be you could say to your grandkids or your kids "Head out on the pit rim walkway and we'll see you at the other end". Because the whole of the pit rim walkway used to be away from the road it was just fine. But now we've had to put this section of the walkway out on the road. People are still using it, the rest of it's still there. It's an inconvenience but unfortunately it's the reality of what it is at the present time.

Ruth asked: So Kit, we can still walk through the historic gardens (those of us who know where we're going)?

Kit said: Yes, (I've been calling it the hidden garden). Jeanine I haven't been up there, you can still get down there can't you?

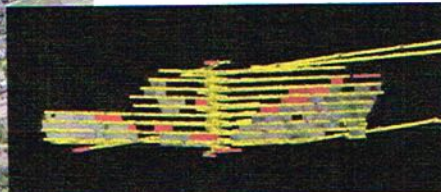
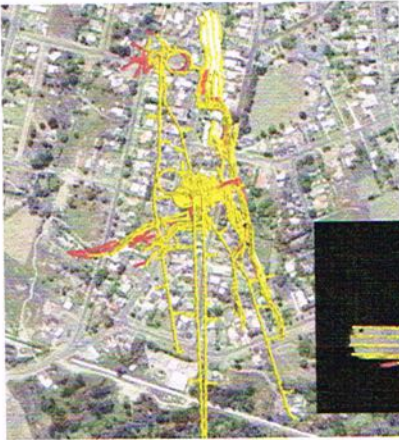
Jeanine said: Yes.

Ruth said: I couldn't see any reason why not.



Kit said: The only reason we stopped the majority of people going down there was because of that (entering the private property issue). People still have their weddings there (in the historic garden) which is really nice.

## Correnso



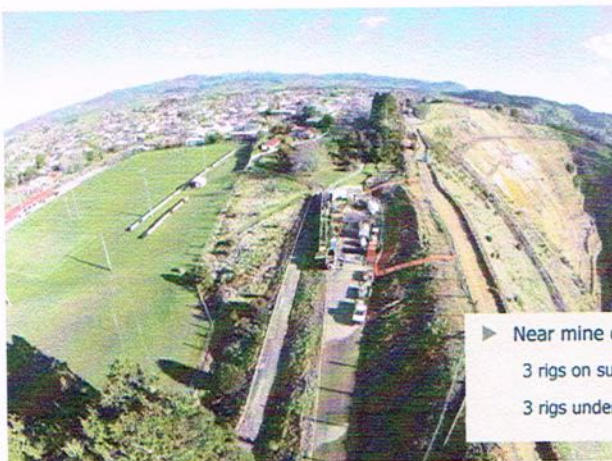
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Kit continued: If you get the Eastender, and I'm assuming many of you get it delivered because we now print, fold and distribute 600 copies of it. (I should say that when my new boss in Melbourne came and saw us a couple of weeks ago her first question was, "What are you doing printing this?" My response was quite simple, "Because that's what the people of Waihi East asked us to do".) So that's what we'll continue to do.

Tim asked all present, "Who receives the East Ender?" All said they did/no one said they didn't.

Kit said: You'll notice from the last issue we changed two things. We have now started to show the backfill and that's because someone said, "We understand you're mining but we don't understand where the backfill is, can you do that?" So we talked to the underground people, the engineers, and they said, "Yes we can". So this in grey here (on the insert showing the spiral) are all the areas that have been backfilled. The other thing we did, (it is not on the slide above but) you'll be aware of it in your Eastender, there's another little map (called CEPA Boundary in the top right hand corner of the Mine Development Plan) that has the Correnso boundary on it. People told me it was confusing to have the workings shown on that map because they weren't changing (month by month) so we've taken the workings away and all we're doing now is showing the actual boundary.

## Near Mine Exploration



- ▶ Near mine exploration
- 3 rigs on surface
- 3 rigs underground

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Kit continued: With near mine exploration, we've got three rigs on the surface and three underground. If you walk the pit rim walkway you will see one to the left hand side of the slip, there's one in Bernie's (O'Leary Oceana Gold's GM) garden, so never let it be said that miners don't live the life of mining, and the third one at the present time is behind our carpark at the top of Martha Street, at the intersection of Martha and Haszard Streets (I took this photo on the slide a little while ago so the rigs have moved from there to the locations named above).

We've also got three rigs underground (so there are six in total). The good thing about the rigs underground is first of all they can work in any weather conditions, it doesn't matter whether it's windy or raining or what's happening. Secondly, they're already down at depth which means that we don't have to deal with that first 150m that we're not actually interested in at all, and the third thing, which is brilliant for us, is we don't need to put barricades around them for noise because they're underground and the people working around them are wearing ear-plugs.

That exploration will continue for quite some time. When we were Newmont exploration was slowing down, now we are Oceana Gold, Oceana Gold has got a significant amount of money for exploration so you can expect to see us drilling for quite some time. Oceana Gold bought us expecting to keep the mine open, Newmont were selling it expecting it would close. We are spending a lot of money and a lot of time trying to find a way to stay open. Those of you who have been listening to me for a long time will remember in this room in 2007 I said, "You've only got 6 months, we're closing". I'm never saying that again, no one will believe what I say.

Maggie said: Is that the time when it was going to become the lake?

Kit said: Yes, I said at that meeting, and after that, it would become a lake.

Tim asked: Were you at the meeting Maggie?

Maggie said: No but the real estate agents told us.

Nancy said: Where are the three rigs underground?

Russell said: They get moved around, they're in various drill cuddies off the development drives.

Nancy asked: Within Correnso?

Kit said: Yes.

Russell said: If you go back to the earlier photo of Correnso, you'll see a lot of little offshoots in various drives, like spurs. The drill rigs are positioned in those, at various times depending on where they target.

Nancy asked: And which direction are they pointing?

Kit said: I need to show you another slide which will explain that.

Danielle said: If you want to know the levels that they're on I can tell you.



## Slevin Underground Project Area (SUPA)



- » Area between Correnso and open pit
- » Most of the land owned by OceanaGold
- » Owners/occupiers of private properties have agreed to the project
- » Will be processed non notified
- » Similar conditions as CEPA
- » Accessed from Correnso workings
- » No 'surface expression'
- » scheduled start late 2016

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Kit said: So this next slide answers your question about direction of exploration (Nancy). This is probably the big update for today. Here in blue is the CEPA outline as you know it. We have just applied for a consent for this little piece here (see the red line to the west of the current CEPA boundary). (Pointing) there is Barry Road, there's Roycroft, so it is that little bit there. So in answer to your question, "Where are you drilling?" we were drilling out from Correnso to see what's there. What we found is a little ore body that's in this area (outlined in red) between Correnso and open pit. Most of that land is owned by us. All of the owners and occupiers in that area have agreed to the project and because they are the people who under the RMA would be regarded as "affected parties" we applied to have that considered as a "non-notified" application. Mark Buttimore (HDC), do you want to talk about "non-notified" and how that works?

Mark Buttimore said: In terms of that particular application, the council resolved very early on that the decision about whether it would be notified or not would be undertaken by an independent commissioner and we arranged for that independent commissioner to be appointed. We had a consultant do the necessary report, there are several gateway tests in the Resource Management Act that require consideration about whether a decision is notified or not. The consultant planner reached a recommendation that it could be dealt with as non-notified after considering all of the technical information provided by the company and reviewed by our own experts, and the commissioner very recently made the decision that it could be dealt with non-notified. So that's the process explained simply. There's quite a lot of technical detail sitting in behind that but the commissioner was comfortable to make that decision.

Kit said: So let's be clear. We haven't got the consent, we've applied for the consent and council has determined that it can be heard non-notified. We now go through that process and see what happens.

Ruth said: I'd just like to state that that is totally unacceptable. It's not just those people that are affected, it's the whole of the east end. We get no opportunity to say anything. Totally unacceptable. I'd like that recorded.

Tim said: Ruth were you aware of the application prior to that?

Ruth said: I was aware that they were preparing for it. I've asked the council constantly what the status was. I was told on many occasions over the last 2 or 3 months that it was imminent and Mark has explained to me what their process was. I'm still saying it's totally unacceptable. There was no opportunity even to give input to the commissioner, the so-called independent commissioner, to have any influence on that decision and I think it's a very poor process.

Tim said: Can I check with you Mark about what opportunities are available for people who don't agree with the commissioner's decision?

Mark said: Through this process, there's no process opportunity for them to be involved at all. We followed the process laid out in the Act, independent planners and independent commissioners dealt with it. I can understand Ruth's reaction to it but we are bound to follow due process.



Ruth said: It surprises me that when Favona and then Trio were consented they were consented via a public notification process. Neither of those sites had any private residential property over the top of them and in fact some of the residences were close, and yet there's been a difference applied to this zone which is so close to residential. Presumably that's not the only criteria but if that one has been changed for some reason or doesn't apply for some reason, I'd like to be told why and how. What's the difference between the two consent applications?

Kit said: Because all of these folk who own private properties here were happy and they're the affected parties.

Ruth said: But they're not the only affected parties, we are all affected parties.

Kit said: Under the legislation they are.

Kerry said: We can have that discussion offline, but they are different projects. This one is 3 to 6 months, it will happen at the same time as Correnso, the effects will be included within or covered by that envelope whereas Trio and Favona were multiple years and there's all of those things which are considered by the commissioner when they're making that decision on an application. And I guess we're having this discussion but you haven't seen the application obviously which puts all those things forward.

Ruth said: Exactly.

Mark said: So I'm just saying that's a very basic answer. There is quite a big difference between Favona and Trio and this as far as project size, project scope and the effects.

Ruth said: Okay I appreciate that input thank you.

Tim said: Picking up on the other bit of Ruth's question, Mark you're saying that the commissioner went through the process criteria that are outlined in the RMA?

Mark said: Absolutely and I'm perfectly happy to put the planner's report onto the website and the commissioner's decision report onto the HDC website.

Eric said: So that area is that near Slevin Park?

Kit said: It is Slevin Park.

Kerry said: You'll see the name SUPA at the top of the slide. It's no reference to an action hero, it's Slevin Underground Project Area. That was just the name that came up.

Nancy said: Will those people that live there now, and they've agreed to it and I understand you're buying them all out, are those houses being removed? Because I understand Newmont never wanted to go there because there's a lot of historical shafts that were never filled in and it was deemed too dangerous. So are those residences going to be moved off, and you're not going to be putting people back there?

Kerry said: So we're not going to go into the discussion about any (private) agreements and whether people are selling or not, but there are no plans to move any of those houses away.

Nancy said: And will they be habitable? It's not dangerous?

Kerry said: No (its not dangerous).

Tim said: And Nancy the other bit of your question was an assumption that there are some underground workings there, some historic workings?

Nancy said: I assumed that's why the picture (on the slide) goes (bends around that area) like that. Perhaps I'm misinformed but I understand that there are some historical shafts that aren't filled in.

Kerry said: And again that's part of the application and will be reflected in consent conditions. We will have to make sure there are mechanisms in place to make sure our miners and people on the surface are safe.



Kit said: Just for clarification, the houses in that area are all habitable and will be habitable, but what happens is when we purchase a property we become the landlord. So if we purchase a property and if it isn't to the standard that the Tenancy Tribunal would say is okay, we would have some work to do. So there might be a crossover period when someone leaves and we've got a couple of weeks of work to do.

Kerry said: It's good that you say that Kit because there have been a couple of houses we've purchased through the Correnso application where we have removed the house because we had to make a decision on the cost to repair and get it to a level that is acceptable.

Kit said: But if we can make them available we will. We are very aware of the fact that rentals are hard to come by.

Graeme said: Nancy has covered part of my question about old workings in that area. I am really upset that you feel the need to put in a non-notifiable application.

Kit said: As I've said all the folks who are inside that area have agreed and they are the people who are directly affected under the legislation.

Graeme said: But were they all approached and negotiated with before the application was made?

Clive said: No we weren't. I'm at 183 Kenny St, just on the corner.

Kit (looked at the slide and) said: Clive you're not in the area. You are in the CEPA area already.

Clive said: That's my next question, where exactly is the area?

Kit (referred to the slide again and) said: The CEPA area is in this area marked in blue, I realise it's a bit hard to see, and the SUPA area is this area here (marked in red).

Ruth asked: But you haven't put a boundary?

Kit said: The boundary's there on the map, its just hard to see.

Clive said: But no one has come to see me.

Kerry said: Yep and again under the CEPA consent if we were to come under your property we would come and have that discussion, but it's not in that area where you are.

Eric Schmidt said: I would like to have a copy of the map (showing the SUPA boundary).

Mark Buttimore said: It will be on the HDC website by Monday at the latest

**\*\* After the meeting Oceana provided a clearer map of the SUPA boundary (appended to these minutes)**

Brian said: These properties that have agreed to this, how many were already owned by the mine?

Kit said: I can't answer that but I'm pretty sure Donna or Janine can. Of the properties that are inside the SUPA area, how many of those did we already own?

Donna said: Quite a few, but there were nine that we didn't.

Kerry said: The Slevin Park area we already owned, and a few of the houses.

Trevor said: What depth will the first drive be? How deep from the surface?

Kerry said: Similar to Correnso, it will come off the Correnso drives which are around 200m to 170m from the surface.

Tim asked: Underneath that andesite layer?

Kerry said: Correct, and again we have to wait for the final consent conditions because we don't know what they are. But we would propose that they would be something similar to what we have in Correnso.



Kit said: So the key to this is similar conditions to CEPA. So the conditions which apply in CEPA already are what we have applied for in SUPA. We will access SUPA from Correnso so there's nothing that happens on the surface, there will be no surface expression (no vent shafts etc). If we do get the consent we'll be scheduled to start towards the end of this year.

Kerry said: And when we say "*similar*" to CEPA, we mean there will be some additional conditions we propose because of what Nancy mentioned, the old workings and ways we put extra controls in place around them.

David said: How close is that Newman/Slevin Street slump that is fenced off there on that corner.

Kerry said: It crosses the CEPA / SUPA boundary to Kit.

David said: Has the underground drilling found any voids in that area?

Kit said: We know that there are underground workings in the area. We know that there are voids there and part of the consent condition will be dealing with that in terms of how close you can go, what you have to do. But remember we've already got the consent conditions with CEPA with regard to how close we can come to the surface and the same thing will happen here. So, what are we 130m from the surface?

Kerry said: And then we have the extra condition as well requiring there to be 40m of competent andesite (above the minded area).

Kit said: And there's no point us going anywhere near old workings because when you put a drill into old workings it starts thrashing around and it thrashes itself to death. If you put a drill into old mine timbers it can't bite any more and you're stuck and you might lose your drill head. If you put a drill head into a void it can destroy it (at a loss of) hundreds of thousands of dollars worth of equipment.

David said: The point is that you're not going to know whether the drill's going to break into a void or not.

Kit said: You do probe drilling ahead of that with tiny little ones.

Mark/Kerry said: So under the Health & Safety Act as well, with working around any old workings or working in voids, there's a whole extra series of things that we have to do and includes, as Kit just said, drilling ahead to make sure we know where these things are.

Maggie said: If you're rumbling around in that part, and you've already got a vulnerable pit which can slip, will mining around there impact on the pit?

Kerry said: Again that's another area that's covered in the applications because that's obviously something we had to consider.

Maggie said: Well I think that's very important.

Kerry said: So again that information will go to the independent commissioner.

Graeme said: Kerry this is why we're really upset about the fact that you've done it as a non-notified application because if it was out there we wouldn't have to ask these questions.

Kerry said: And that's why we're discussing it with you now. In the size of the scheme, it's a reasonably small project and that's the decision we made, to go through it on the non-notified basis. If it was a large new mine we wouldn't be doing it non-notified.

Maggie said: With the old workings, do you know what condition they are in? For example are some of them just holding up the earth because they are full of water? Do you know where they are exactly or are you just going to guess or do that drilling to see?

Kerry said: No, we don't guess because guessing puts a lot of people at risk.

Kit said: When Sonya asked for the map of all the old workings, and particularly this area, about 2 months ago I gave it to her. She said she was going to share them and I thought she would have. Anyway, a couple



of things, de-watering of the open pit here means that this area wouldn't have water in it anyway; and secondly, water doesn't stop things collapsing.

Maggie said: Okay so that is part of what I'm talking about, how do you know what's in them?

Kerry said: That's all part of the mining process and how we go about mining that area safely.

Tim said: So the commissioner who makes the decision would have to be satisfied that Oceana could do so safely before granting the consent?

Kerry said: And I assume there will be consent conditions relating to that as well.

Tim asked: Mark Buttimore, given that the decision has been made that it be a non-notified application, how much information will be available to people in terms of the evidence that is considered by the commissioner?

Mark Buttimore said: I'm happy to put the application online and when we put the Council report up to the commissioner, I'm happy to put that online.

Tim asked: So that will be council's assessment of the application and its pluses and minuses?

Mark said: Yes, the assessments from our vibration experts, ground settlement people, from geotechnical experts in relationship to how we want conditions around voids and old tunnels if the application is granted and the mining can go ahead. Our geotechnical person is an Australian professional Dr Fuller. I have already sent him the current Work Safe requirements so that he can assess the Work Safe requirements against what he thinks should happen. Mining in areas with old voids is not new for him, he has experience with it in the past. The council in fact is happy to make that information available. It's not secret, it's public information.

Nancy said: If it's agreed to then does that not set a precedent that you can extend Correnso in other areas as well?

Kit said: There's no such thing as a precedent in this business. Every one of them is decided and determined on its merits. We've applied and it could be that we don't even get this. It could be that, as Mark said, the independent commissioner may decide that there are things which aren't going to work here. But what we've done is we've applied.

Bev said: I understand those houses that you don't own at the moment, and you say you've got their permission to mine under or whatever, to apply for that consent, do I understand that you have offered to buy those houses?

Kerry said: We have agreements with them and we're not going to go into those because there's confidentiality matters around them.

Tim asked: So that's private information between the company and the owners of those properties?

Bev said: I understand that it has happened though.

Clive said: Just to clarify that point, it's only if you actually go under the house? If you miss it by a metre, no compensation?

Kerry said: That's what exists in Correnso at the present time. If there's a development drive under your property you get ex gratia, if there's a stope then you're eligible for us to purchase and the other people in there are eligible for AEP.

Tim said: So at some stage there'll be some consent conditions for SUPA published (if the consent is granted) that will determine what the rules are around that process for the company.



## Communications



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Kit said: You are already getting the Eastender and I presume that you're reading The Update as well. We've had lots of phone calls from people asking about the earthquake and the tailings impoundment. If you don't understand how the tailings impoundment would stand up during an earthquake, I suggest you read The Update. It's in last week's Waihi Leader, it's also on-line.

## Amenity Effect Programme



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Kit continued: In the last 6 months we've just finished this payment period, there were 341 payments totalling \$290,000. At a quick look that's the third or fourth highest AEP payments for a period we have made. You'll remember that AEP started life as a voluntary system (for the mining company) and then it was folded into the Correnso consent conditions. If the SUPA area goes ahead and that consent is granted it's bound to be a consent condition in there too.



## Independent Review Panel



### IRP Property Purchases (as at April 2016)

- 8 proposals reviewed by OGC and 5 were accepted. Of these 5, 3 settled and 2 no longer wished to proceed so withdrew from the process.
- Budget remaining: \$3,053,755

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Kit continued: For those of you that aren't familiar with IRP, the Independent Review Panel, was set up as a consent condition and this is for people who, for whatever reason, just feel that they need to leave. They come to us, and we're the wrong people to come to because we work for a mine. The IRP was set up as a group of independent professionals who were able to assess that. They came up with eight proposals, they gave them to us, we accepted five of those. Of those five, three settled, two it turned out no longer wished us to purchase their house, so three did and the budget that remains is \$3 million. So we still have \$3 million to spend on the IRP in terms of purchasing properties.

Kerry said: I can't remember whether it was 16 or 14 originally applied and between the period of application and them being considered either six or eight of them sold anyway on the market. So there were initially a lot more that applied but were sold before the deliberation (I think a period of two months).

Tim asked: That number's bigger than I remember?

Kerry said: So there was \$4 million available. If I step back a little bit further, originally we had a \$2 million process for IRP before the Correnso consent conditions. So there was a whole round that was done beforehand and through to Correnso. We said, "Well that stuff being done is outside of what we're talking about" and then there was the \$4 million moving forward for Correnso. So this is the first subtraction from that \$4 million.

Nancy asked: Does that include the extra \$1 million for Daybreak and Grace?

Kerry said: Sorry you're right and that's what we haven't added on to the top of that, half for each of those two so this was just on the Correnso stuff. So we said we'd give you a number. Now that number will be a little bit up and down because there's all sorts of CPI and other bits and pieces that we need to apply to it but just as a general feeling for people, we basically had three come out of that so you're right there's that plus the \$1 million because of Daybreak and Empire.



## SIMP Update

- SIMP is required by Correnso U/G Mine Conditions of Consent 38-45
- A number of indicators have been established to assess, monitor, manage and re-assess the social impacts of Correnso
- Six main themes: Economy | Employment | Property | Community | Health & Wellbeing Future of Waihi including Waihi Gold's legacy
- Data required to be reviewed and reported on annually by SIA specialist (KPMG Banarra) approved by Hauraki District Council
- Annual perception & employee surveys are required by the SIMP
- Focus for the 2016 SIMP is property which will be covered in detail in the perception survey with less attention being paid to the remaining themes
- Phoenix Research will again carry out the perception survey

Kit continued: The Social Impact Management Plan (SIMP) was again folded into the consent conditions. Each year we go out to the community and ask a whole range of questions and they are the same questions each year except for one little section where we change the focus. So this year the focus is on property because given the property market and the way things are happening in Auckland and the ripple effect of what's happening there we thought this would be an appropriate time to do that. Now that we did last year's SIMP we've actually got a baseline of data, which means we can determine the changes because part of the consent condition refers to the idea, "OK you've got this baseline data and things change, what are you going to do about it?" (The results of the assessment) allow us to then make decisions about that. We will be reporting on to you in the same way that we did last time. All that information goes on the website. Phoenix, the big research company in Auckland, are the people who do the survey. We don't do it. Secondly it is anonymous, they ring up but they ring both land lines and mobiles. So if you're one of those modern people who doesn't have a land line and you only have a mobile it used to be that you never got rung because you only had a mobile. So you might get rung on either of those. It is totally random within the 863 area so from Waimata out to Waikino and out this way a little bit. Some people last year said, "Your process isn't random because you picked some people". Yes we did because (as well as the random selection of people in the 863 area) we have to ask specific occupational groups like a secondary school principal and it would take a long time (if they were) to ring up Waihi hoping that one day they will find a secondary school principal. If you didn't get rung last year you may not get rung this year, it is totally random, they have one of those random number generators. That survey is underway now. We are also doing a staff survey as part of the SIMP. That's underway at the present time (and includes questions like) "Would you leave if the mine closed? Do you spend your discretionary income in Waihi? Does your partner live in the area and does he or she take part in community groups?" All that provides rich data, which informs us where to next.

Before I sit down and Russell stands up is there anything for the community side of things? We can talk as long as you like afterwards, I understand you're a little bit upset about the SUPA application.

Ruth said: With the SIMP, are the staff who are chosen randomly chosen?

Kit said: No we do all staff.

Ruth said: You do all staff, but only a random selection from the community?

Kit said: We could choose random staff but it seems we've got a captive audience and we've got 300 of them and Danielle sits down and forces them to do it. One or two say, "No I don't want to" but we can't do the whole community.

Ruth said: I'm not suggesting that I'm just trying to get a sense of the SIMP.

Kit said: But the staff survey doesn't feed into the Phoenix survey.

Ruth said: It's doesn't?



Kit said: No, no that's for us.

Ruth said: Well that's what you suggested here. You were talking about the SIMP.

Kit said: I didn't explain it carefully enough. So we survey all our staff so that we can find out things like, "When mining ends, will you leave?" But that information is for us and then that information feeds into the SIMP but it doesn't feed into, "What do you think of mining?" because that question isn't asked.

Kerry said: I think were Ruth's going is the Phoenix survey is done separately to the staff survey but they both feed in as inputs to the SIMP.

Kit said: We do the staff survey.

Tim asked: Are both the staff information and the community information part of the published report?

Kit said: Yes, and the stuff from us, we just send that straight to Phoenix. So totally anonymous from us and then it goes to Phoenix.

Kerry said: And then it ends up in the SIMP and the SIMP is a requirement to send to council.

Graeme said: Yeah I understand that but when you get it in the SIMP is the staff feedback separated?

Kit said: The questions that are asked of the community are different to the questions that are asked of staff. Questions for staff include "Do you smoke?" and "Do you do stretching exercises before you start work?" We don't ask that in the community.

Graeme said: In the final report, is the staff one incorporated in the Phoenix one?

Kerry said: The SIMP is broken into different sections. The Phoenix data is in one section, the staff data is fed into another section within the SIMP.

Tim said: And it's all available to read afterwards (when published)?

Kit said: Yes.

Maggie said: I understand about the randomness of asking people in the community but can you tell me the people that are not random like the primary school principal?

Kit said: Yes I can find that list. Secondary principal is definitely one of them, I think primary principals is another one and there was another one about businesses which have a turnover of more than \$x. I can find the information and we'll put it in the minutes.

*Kit's answer post meeting is: We had questions directed at larger businesses last year when one of our primary focuses was economics and employment. Our focus this year is property, so the economics question does not feature. This year our focus is on property owners, with a 50-50 sample split between Waihi East and the remainder of Waihi. The tandem residents' survey also requires people to be over the age of 18, and live in the 863 calling area. In the residents' survey we also work towards a 50-50 split between mobile phones and landlines. All of this means that while the calls are random, sometimes a respondent may be called, but not interviewed if he/she does not meet the survey sample parameters, for example, if they are in the 863 area but live at Athenree, or the surveyor wishes to interview a home owner but the person is a tenant. School principals are not specifically targeted this year, but may well be when the topic for the year's survey is community or health and wellbeing. There are no specific positions/occupations targeted this year.*

Nancy said: Is Oceana Gold going to support "Streets Ahead" beyond this year?

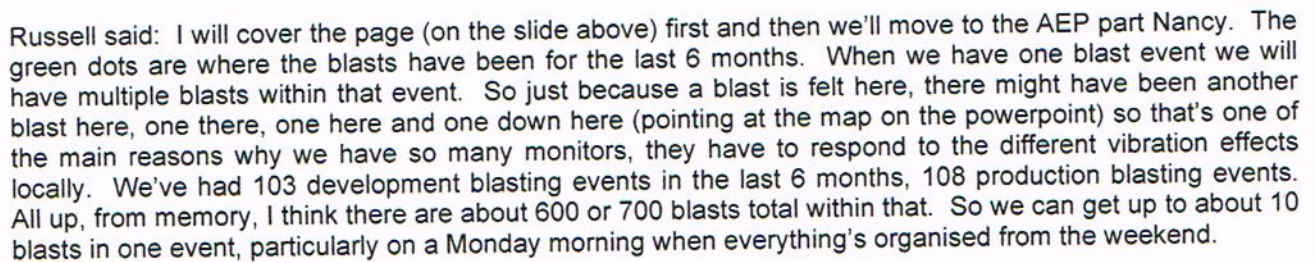
Kit said: As far as I'm aware.

Kerry said: We're working through that and it's a discussion with the Waihi Community Forum as well so they have a reasonable fund at the present time and they're working through ideas. Where it goes from there will be discussed after that.



Kerry said: As I say that will be part of a discussion through that process.

Kit handed over to Russell (his area of expertise)



Maggie said: That vibration word is not appropriate for many of the blasts, some are vibrations and some are definitely shocks.

Maggie said: Yes, "vibration" sounds benign.

Kerry said: Vibration is terminology that is used throughout the consents and we are just being consistent with that.

Russell said: Yes.

Russell said: You're meaning the night-time?

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Eric said: How many are permanently on?

Russell said: Three are permanently on, the main ones along the central rib.

Eric said: No incorrect.

Tim said: What do you say the situation is Eric?

Eric said: There was an earthquake on 2 September and 'main south' didn't register. Why not? (*Others commented they have the same question.*)

Kerry said: I must admit after the earthquake I asked Russell the same thing.

Russell said: For a start off, the ones around the outside are set to come alive at 6.30am and go back to sleep at 8.30pm, so they are set to read the permitted blasting times. The ones up the central rib are designed to be on permanently. There is however a problem with the monitors themselves. We've been in touch with the manufacturers about it. For some reason they suddenly stop monitoring and that's what happens with main south. It happens probably once a fortnight or once a month. One will go to sleep. We have a data trap system that emails me regularly to tell me when they go to sleep. Main south rang in quite happily at 8.30pm to tell the system that it was all working but for some reason it then went to sleep. We come in the next morning and find it was asleep and we go back out and reboot it. So the system is not perfect because electronics are not perfect. But we have safeguards around it to try and minimise that impact and those safeguards are that we require these monitors to ring in three times a day to say, "Yes I'm working and I'm monitoring". That's partly why we set up the (phone in) system as well, the emailing system. So you're correct, they're not monitoring all the time because of electronic issues.

Clive said: I'm saying all the monitors didn't record the earthquake and we are finding out why now.

Russell said: So these ones (around the edge) are designed to be switched off at night.

Kerry said: And there is a reason for that.

Russell said: These things go off for everything, they go off for trucks, parties, strong winds, earthquakes, blasting. If we have them on all the time 24 hours a day every monitor would ring in. At the moment I'm getting about between 50 and 150 emails a day from vibration events. Normally less than 10 of them are related to vibration blasting so nearly everything else is to do with, what have we had, people using the bunkers as sawhorses, people dropping trees on them, council doing roadworks out front, mowing lawns. So there's vibration out there all the time. When we have them on all the time there's so much information coming in that what we find is that Spark, when there's emails flying around, they suddenly go, "All those emails are identical, someone is spamming us" so we've had lovely issues with having to go back to Spark and saying, "Stop filtering out our emails because that's information". The other way around that is to reduce the information a little bit by (doing what we do and) turning some of these off at night when there's no blasting anyway.

Tim asked: Main south turned off, did the other two main ones show up the earthquake?

Eric said: Yes.

Russell said: Yes, as did the Trio monitors. The Clarke Street monitor, Scout Hall, Moore Street and the Core Shed monitor, all went off. As you're probably aware Clarke Street is a bit of a unique beast, it really likes earthquakes. We're not entirely sure why the vibration is so accentuated there. (With the earthquake) it actually registered 8.9mm/second. All of the other ones averaged between 1.9mm/second and 2.6mm/second. So we had eight monitors go off, seven of them did 1.9mm to 2.6mm and then that one beast went 8.9mm. We think it had to do with shallow soil.

Ruth said: Well that was my question. I was sent the Clarke Street monitor as an example of what it was and it was a big gentle shake, completely different to what we experience with blasting. And yet two that were functioning only showed 2.4mm or 2.6mm and I'm thinking, "This is ridiculous".

Russell said: It has to do with the energy in a blast versus the energy in an earthquake. There's a phenomenal amount of energy in an earthquake. With Clarke Street, we believe the reason (it reads so high) is that the bedrock is quite close below it. There is very little buffering between the actual earth mass



being moved and the soil above. Whereas, in Correnso, you've got 100m of ignimbrite, alluvium, topsoil, above it. So you have a bit more lubrication between the bedrock underneath and the topsoil above, where your houses are. Also, you talk about the different feel (between an earthquake and a blast), that is not about the speed it is the magnitude of movement. A blast is very short and sharp, the movement in a blast is micrometres (the thickness of paper), the movement in an earthquake is millimetres, centimetres or in some places metres when they start destroying properties.

Tim said: But not as quick?

Russell said: Not as quick. And it's actually the slower vibrations that cause more damage. Because it's when you get that rock on effect that damage occurs because properties start to get that sway on. The faster we can do a blast the better because property doesn't get time to accelerate.

Ruth said: I'm still not happy with that. We think Clarke Street measured a whole lot more because we think it's closer to the bedrock. How many houses are close to bedrock in Correnso? We don't know because we haven't investigated it.

Russell said: We know, we've drilled.

Kerry said: We did a wide range of monitoring, we put the roving monitors out to double check as well and they go around and they give us that information to make sure that the blasts are consistent.

Tim said: We are talking about the earthquake and the fact that the registration of the movement from the earthquake was huge at Clarke Street and small at the other monitors. Ruth what's your concern about the impact of that on the blasting vibration? How does that come back to the company?

Ruth said: Because this is not the only instance where I believe the monitors have not recorded accurately.

Tim said: So you're worried about the accuracy of the recording of the monitors?

Ruth said: Yes (*others also said yes*).

Kerry said: That is looked at by external experts for both us and council. The other important thing is these aren't installed to measure earthquakes so there are different purposes so you use different machinery for earthquakes if you are purely monitoring for that.

Tim asked: So Kerry are you saying that both council and Oceana audit?

Kerry said: Yes it's a continual process.

Kerry said: HDC gets the results as well and if they've got concerns they fire it off to their external consultant who also reviews that information and then they have discussions expert to expert and work out where we are and what we're doing.

Tim said: How do they make the comparison between what these meters are registering and what they should be registering?

Kerry said: Well again that's where we have the roving monitors that we put out and they do comparisons between those as well so we have a series of monitors that, if people are concerned, we put them under their house and leave them there for a couple of weeks, we run them and we compare them with the monitors in the vicinity.

Trevor said: When we get the map, it looks as though they are working way up that way or way down this way, and yet we seem to be getting more vibration now than what we got when they were just across the road. Can you explain that?

Russell said: Where are you living?

Trevor said: I'm on Kenny Street just this side of Matura Road.

Russell said: So you must be near the centre, we are not just moving further away from your place, there's a couple of things involved. One is the development drives are going this way and heading out this way so



we're looking at Daybreak and Empire but at the same time we're doing production blasting. So the production blasting is actually in that main zone in the middle and we're still filling in getting to the top of that so we are still blasting in the middle.

Kerry said: And those production blasts will be the bigger blasts.

Maggie said: I agree with Ruth there is a disparity with the vibration monitors. With the earthquake I was up and I monitor the fireplace chimney and it rattled and I called out, "I think we are having an earthquake". At the next blast, it was probably a production blast between 1pm and 2pm where it hits our house, so maybe we're on the rock, because it hits our house like a train going through it and yet across the road in that monitor there was hardly anything there. So I no longer believe that monitor.

Russell said: I'm happy to put a roving monitor in at your place.

Maggie said: You have, and you picked it up in the morning and there was a superbly big blast that afternoon.

Kerry and Russell said: That wasn't intentional.

Tim asked: So the monitor can go back to Maggie's place?

Russell said: Yes definitely.

Maggie said: And can you put it in the house?

Russell said: We have to consider that. Generally you stay away from that because we are responsible for the vibration in the ground but the consent doesn't require us to have consideration of the property.

Maggie said: When I am in the garden I hear it but the blast shock isn't as bad as when I'm in the house.

Ruth said: And when we discussed this during mediation, it was discussed that if anybody wanted a monitor in their house, understanding that it wasn't a compliance monitor and that it was different then it would absolutely be done.

Kerry said: I remember there being a lot of discussion about why they're not appropriate. I don't recall whether we agreed.

Sonja said: We talked about the idea. Some people wanted to have the monitor put on their brick house and he said that was not the best idea.

Tim said: This relates to vibration workshop (type) stuff and what shows up in houses versus what's happening in the ground.

Sonja said: Can I just go back, for a second, to the earthquake vibration readings that we had? There was about a 1.2mm disparity between the main central and main north monitors? Could you explain why there was a difference? Was that because of the exacerbation because of the underground voids or a difference between the monitors? Is that a concern?

Russell said: I'll steer away from underground voids, I'm not aware of any. More likely it is due to the shallow soil types underneath the ground. So this is the top 20m or 30m. That's what tends to have the biggest impact on those. It's a relatively small difference in vibration and that's if your property is built on fill versus being excavated down to clay, shallow substrates.

Kerry said: We've had this discussion at a number of these meetings, that vibration transmits differently in different parts of the town because of the underlying ground conditions and that's where, when we have these vibration workshops and you've got the experts there, you can really pick their brains on the specifics.

Sonja said: The difference between the disparity between the two monitors in the case of the earthquake was quite a lot more significant than I expected it to be given that I watch you all the time and the difference between say blasts (differences) are not as great as the one in the earthquake and I figured because it was a lower frequency the whole different rolling motion obviously made quite a difference.



Kerry said: Russell is very good at this stuff but he's no expert on the difference between seismic activity caused by earthquakes and blast vibrations, so we're in that space at the present time.

Brian said: Could the reason why main central seems to have a higher blast rate be because that's where your spiral is?

Russell said: That's the main reason why it's highest yes. It's central to the blasting. It has more blasts directly underneath it but also we have blasting at different locations of the mine. If we have two blasts either side of the mine (they will meet in the middle and the middle) will be affected by both of them.

Tim said: I'm wanting to be cautious about not drawing together what people seem to be suggesting which is that if there is a void, a gap in the ground under there, that it means that it's less stable. That's not the case? It's just that there's more activity concentrating in that area?

Kerry said: And if I can jump in, it doesn't matter that the spiral's there. If the spiral's down the other end that's still the centre of the mine so it will get more vibration because it's in the middle.

Graeme said: Back to the question about the difference between the two recordings of the two monitors during the earthquake. The variation when you're doing blasting would be exactly the same, if the blast was in the middle?

Kerry said: Again I don't know the difference between vibrations and earthquakes. Previously we've talked about vibration transmitting differently through different rock types etc, that's why we have so many monitors out there and that's why we do the monitoring with the roving monitors as well just to make sure we get coverage.

Graeme said: I accept that but it bothers me, and with the monitor outside our house, I've been inside when it hits and you check the recording later and you think, "This isn't right". Could it be that where the monitor is, is on a (couldn't hear the word – think it was about it being at a less affected site – Tim).

Russell said: I'm happy to put the monitor back out.

Maggie said: Inside the house?

Russell said: I can do that yes. What I will do Maggie is I'll probably put two monitors, one outside and one inside.

Kit said: Remember that we offered the blast vibration workshop, and we've offered it for the last three months in a row? (We've had expressions of interest from) four people. We can't really run it without 10 because it's remarkably expensive. But if you would like to come to a blast vibration workshop, which lasts the entire afternoon, and happens here, leave us your name and when we get 10 we'll make it happen.

Jeanine said: We've now got seven (so if you are interested in attending, let me know your names after the meeting).

Eric Rhodes said: Those vibrations they're talking about, we live right on the corner of Dobson and Grey Streets and we're getting more vibration now by a long way from Correnso than what we did from Martha.

Russell said: I'll have to look into it Eric. Again I can put a roving monitor on your property. I'd rather find out some detail and get some magnitude of it to see what it is.

Eric Schmidt said: Now it gets a little bit more interesting, I did some homework. I made a list from 15.8.16 to 14.9.16 with all nine vibration monitors (I did not use Secondary North). South West registered six times out of 45 events although (the monitor) straight beside is up at 2mm/second and yet this (South West) doesn't even register. You can't tell me that this thing is correct, here is the proof. You can't have two side by side and one up at 2mm/second and one not anything. I want you to explain this to me in writing.

***(Post meeting note by Tim – Oceana Gold have a copy of Eric's spread sheet outlining the results of his research, and will provide a written response outside of these minutes.)***

Kerry said: Eric did you attend that vibration workshop?



Eric said: I've been there.

Kerry said: Getting answers to questions like this is the benefit of talking with those external experts.

Tim said: So I want to ask about this vibration workshop. It sounds like there's an assumption that it will just be a repeat of the information that's been presented previously. But I'm assuming that we can bring these experts together and they can answer whatever questions people have regardless of whether they're new questions or old questions, is that right?

Kerry said: Yes.

Kit said: Absolutely.

Trevor said: This gentleman (Eric) is saying the vibration is getting worse from Correnso but you are only about 150m from his place anyway underground. Roycroft Street and Buller Street, according to your Eastender anyway, they're sort of working up there so they're getting closer.

Russell said: That's why I say I'd rather get some detail for Eric rather than say yes or no because you've got to accept peoples' feelings on these things and the best thing I can do is I'd like to try and get some hard data on it. I can put your property onto a map, get the distances of the blasts to it, so get you a comparison of the distances to the pit blasts for example.

Eric said: That would also be good when you do that for the secondary south west and secondary west that is not registering at all, nothing.

Graeme said: Just on that, you're saying about investigating these blasts, can you also take into account the amount of explosive used and the depth of the holes? The depth of the charges?

Russell said: The explosive's maximum instantaneous charge, yes that can be looked into.

Graeme said: So you would take that into consideration, and can you release that information as well?

Russell said: I think so. I'll have to see what I can find out. I've got to investigate and figure out what I can pull out of the system and what elements it'll have.

Maggie said: I really appreciate the morning texts and I do appreciate them Donna but I would like something a little bit more precise because then I can go away for the afternoon (if there is going to be a big one).

Kerry said: But we've given you the notification system.

Maggie said: I want to know what sort of blast. So I can go away. I really do mean it that they absolutely are too much to cope with.

Tim said: You're getting a text, which is great, but you want to know if it's going to be a big one so you can be away?

Maggie said: Yes.

Graeme said: Maggie, you want to know the size of the blast. The company must have some idea before you discharge it, the amount of charge etc?

Kerry said: I am not sure that information would help. We have the text and email, we have the blast notification system which we let off just before as well to deal with that startle effect and I understand you don't want to have one of those so we do quite a lot to assist.

Maggie said: The message is just a generic "blast north/blast south" which is great but sometimes they are rumbles and sometimes they really hit us. I would like to know when so I can just go away.

Tim said: So I'm not sure whether that's technically possible from the company's perspective?

Russell said: That's not my field.



Tim said: Is that something that you can look at and give an answer to at the next meeting?

Kerry said: We can look at what else we might be able to do with the system and the notifications that currently give.

Clive said: Where it all comes to a head is when we get these AEP payments. We all live next door to each other and all have a natter about, "How much did you get this time?" We all find we get totally different amounts of this, that and the other, whether it be 1.4 or 1.5 which is the category we're talking about and then the 3, 4, 5 pops up occasionally. We got one of our little group that got a reading when no-one else did, I don't know how that works. That's what we want to know, we all live in such close proximity why are the readings so different?

Kerry said: That is something we can put into that vibration workshop to explain it because the way in which they are calculated is based on charge weight, proximity, level and there is always going to be a point where it changes. Maybe as part of that session we can have something around that AEP and exactly why your neighbour might get something different.

Tim said: And Clive that's helped me to understand that it's not just about, "Is the vibration accurate?" it also has an effect on your AEP.

Clive said: The money's the important thing. You can blast the .. out of us as long as you pay us the money.

Eric Schmidt said: That's one more thing. On 1 January to 30 June 2015 you've got written 1.45mm/second over, and then on 1 July 2015 to 31 December 2015 you put 1.5mm. And again this time is also 1.5mm.

Jeanine said: That's my fault because I just started taking over that side of it. The correct number is 1.5mm.

Kerry said: Have a look in the consent conditions because that's where it dictates and that's where it comes from so I think Jeanine gave you a reason why it was 1.45mm and it may have been an administrative error.

Tim said: So it was the figure 18 months ago that was incorrect?

Jeanine said: That was before me.

Tim said: It does sound like we're going to be able to get into more detail around vibration if the vibration workshop happens. Is there more to say on vibration before we move on?

Russell said: I think we've probably done that, the average is the 95th percentile so hopefully people generally understand those numbers.

Nancy said: Are you covering why the AEP payments have dropped dramatically? I think Kit alluded to it on the radio at one point, there's a different formula, a different calculation? Blast hub was off line from 13 February till way into May and when it came back on, everything had dropped quite a bit.

Russell said: I will see if I can explain this.

Kerry said: How about I have a go and then Russell can tell me that I'm wrong? It was over-estimating as far as the algorithm went, so that's been tidied up. The way in which the programme was working was actually allocating bigger vibrations and bigger payments than was actually being recorded.

Russell said: It was actually over- and under-estimating in different places. What it was doing was penalising the people who were more central to the blasts at the expense of those people that were more distant.

Tim said: So Russell what's changed now? Has there been a technical change?

Russell said: A technical change.

Tim said: So it's more accurate now than it was?

Russell said: Yes.

Ruth said: And you chose not to tell us?



Russell said: Number one we don't have to but it was discussed between our vibration consultant and the council's vibration consultant so the two of them had to figure it out.

Clive said: That means you didn't tell us.

Tim said: Is the good news that you're not going to ask for the money back from the overpayments?

Russell said: No definitely not. And the other thing is that the total amount hasn't changed a lot, I think, it's about \$10,000 less.

Kit said: I mentioned this on the radio, I think I might have put it somewhere else, I wrote it somewhere.

Russell said: So it's very much swings and roundabouts. Those people central to the blasts have received more and those people more distant have received less and it (payment) is more relative to the actual vibration monitor readings.

Tim said: My humour gets me into trouble sometimes but do I get the sense from your comments that it would have been helpful if there had been a change for that to be explained to you in some way?

Maggie said: It would have been nice to have some communication.

Tim said: Right, "My payment's changed therefore I need to know why my payment's changed". Kit you're saying that it was explained?

Kit said: Not everybody may have picked it up. I certainly mentioned it on the radio but I'm well aware of the fact that not everyone listens to radio. I think I might have written it in an Eastender but it might have just been one of the little bits on the side.

Tim said: So useful comment perhaps that if things like that do change people would like to be told?

Clive said: Mine changed, the January payment was \$800 odd, this time it was \$400 odd and the blast is coming towards me because I'm right at the bottom on the secondary.

Kerry said: It depends too where we were blasting during that period leading up to January and where we were blasting in the next period in terms of proximity.

Jeanine said: The blasting was moving further away as well.

Kit said: Can I just clarify something here, when you get the Eastender map, and that's the one with the yellow and the red on it, just because you see the red there doesn't necessarily mean we are working there all the time. We often go somewhere else as well so we could be at a lower level, we could be at a higher level, we could be somewhere else. So we could be at four or five different places in the mine at the same time, so it's quite likely that your AEP payments will change.

Clive said: But we try and track it you see by looking at these readings, we sit at our computers together and try and centralise where the blast was.

Kerry said: And that is probably where a lot of people get caught out. You're looking for where the blast is. In fact there's multiple blasts within that event.

Clive said: We know, we hear it go "boom, boom, boom, boom, boom".

Russell said: No, that's not it. Those bang, bang, bang, bang, bang feels you get actually occur over one blast. (Russell drew a picture of a tunnel on the board and said) in the development drive for example, they will blast the outside in the first millisecond and then the next inside area and then the next and then the last. So when it's going bang, bang, bang, bang (pointing to the picture and moving from the outside of the tunnel to the middle) it's actually closing in. So those multiple blasts that you're hearing are actually one blast.

Bev said: I understand that, but I read into what Kerry said that there would be multiple positions?

Russell said: Yes true, that's correct too.



Bev said: One down our end and one somewhere else and they all go off at exactly the same time?

Kerry said: The consent conditions have the timing as well, the 12 seconds, the 9 seconds and the 18 seconds and the blasts have to occur within that timeframe. So it's all controlled by computer effectively and electronic detonators that set these things off at precise times and they can separate them by milliseconds so there's actually a lot of control over that process.

Tim said: So if Clive and his team are monitoring the blasts and have a question about (say) where it's from or how come they are getting different readings, what's the best thing for them to do?

Kerry said: Feel free to give us a call, you've got the 0800 number. Our team will talk with Russell and we'll work through that.

Clive said: We've had some pretty big wallops, I'm not saying every day, but every now and again there's a big one and we're pretty realistic about this.

Kit said: A lot of this will be covered in the vibration workshop.

Maggie said: Actually I think that's what the whole problem is. We're feeling it, yet hardly anything comes out on the vibration monitor and I think that's what I'm hearing here.

Trevor said: Do houses on piles feel it worse than houses on a concrete base?

Tim said: I'm going to say, "Come to the vibration workshop", because all of these questions are great questions and that's going to help to elucidate that.

Russell said: Yes I think that's quite important.

Tim said: Russell and Kerry - how often do the blast crew meet and evaluate the blasts and what sort of effect they have and what sort of readings?

Kerry said: Well it's a continual process and obviously when we get complaints as well we mention that at our morning meetings with the full crew there so they understand where we're at and what's happening. We take that information as well but they're constantly looking at the results and we're looking at where they're blasting and the designs. It's a full-time job for a number of people.

Eric said: And your coaster system it doesn't work. Sometimes there comes nothing and sometimes it plays the music and then you're sitting there and there's no blast.

Kerry said: Or else you haven't felt the blast that's gone off?

Eric said: No.

Helga said: Or it comes before it's gone off.

Russell said: We've actually been discussing that a bit the last few days. There's a second button that they push to let me know that there's a blast so that goes into the database and that's what actually starts to populate the web page but the one that does the coaster is a radio signal from the portal and we were just talking about that yesterday. We'd like them to hit that probably at least a minute, maybe a minute and a half, beforehand.

Tim said: So people have a chance to register that it's gone off.

Kit said: Can I just clarify this, are you saying that that's playing music outside the blast times?

Eric said: Yeah.

Kit said: So outside 7am to 8am and 1pm to 2pm and 7pm to 8pm?

Eric said: 1.30pm the thing (coaster music) starts and there was never a blast.

Kit said: All that means is we've been really good that day.



Eric said: No there is no blast and no register on the website.

Kit said: I'll take that as a compliment. If the blast notification coaster goes off that's because it's been pushed a few seconds before the blast has been initiated, it just means that that blast did not register and you guys did not feel it.

Lots of voices saying, "No" / disagreeing.

Kerry said: So if you have one that goes off and you don't feel anything, make a note and let us know and we will tell you whether there was a blast or not. If you feel a blast and you haven't had a notification we need to know because there's probably something wrong with the coaster.

Donna said: We've had to replace a couple. Give us a call and we will come and see you with a new coaster.

Tim said: Russell you're saying that there's some discussion at the moment about pressing that button just a bit sooner to give people more notice?

Russell said: Yes I think there is a bit of a delay in it getting through. I don't know whether it's the radio signal or the messaging system but we've heard a couple of times that by the time the signal's come through the house is already rattling which isn't what we want.

Kerry said: The other thing is you are having it go off and you think there's no blast. We'd be interested to know because we will go back and check and let you know if there was a blast or not. If you're saying that these things are going off with no blast then we just want to make sure that that's not occurring.

Eric said: Or they go off after the blast.

Kerry said: Oh so it goes off after the blast not that there was no blast.

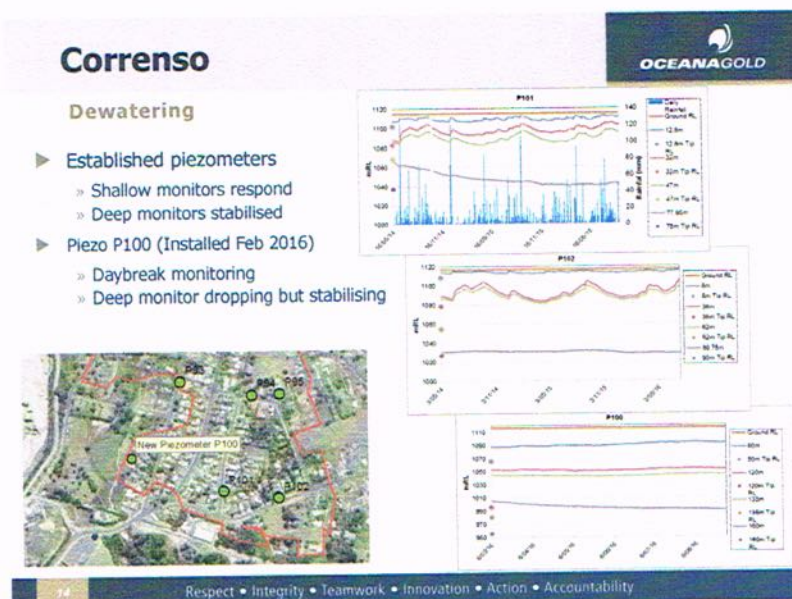
Helga said: Sometimes, or it is both.

Trevor said: Just one thing, the vibrations in my opinion aren't severe enough to be warned before them anyway because the monitor gives you more of a hurry up than the blast.

Kerry said: We've had feedback that we don't get a warning when a truck goes past and causes a similar noise and people get more of a fright from the monitor. Some people think they're great because they give them what they need so it's a choice.

Trevor said: I gave mine back to Jeanine because every time it went off my hearing aid would just squeal.

Russell said: That's the reason why I put a switch on them.





Russell said: At the last meeting we were just installing a new piezometer for the Daybreak operation. That has been going for a while now so you can see the influence of these monitors due to rainfall. The blue dashes are the various rain events we've had through the last 2 years (it's better to watch it over a longer period). You can see how the water levels near the surface fluctuate relatively quickly with rain as you'd expect and the water level in the lower ones have a much slower response. They do still normally respond to rain it just takes them longer. The one we were concerned about at one stage was P101 which seemed to be steadily declining. On discussion with the technical experts for the groundwater (they said) it had to do with (it being below the) andesite below the water interface so that's actually more impacted by the underground dewatering. So the upper one is responding to the normal water levels of the surface, that bottom one is responding to the water levels in the underground.

Kerry said: So effectively that purple line was heading (down) to a new equilibrium and it's reached that now.

Graeme said: Where is P101?

Russell said: Bottom of Gladstone Road.

Kerry said: So what's important is that the top lines haven't done the same thing (track downwards).

Russell said: P102 has been pretty stable all the time, fluctuating in the shallows and steady in the lower level and P100 has now stabilised since having been drilled. And I should apologise the timeframe of this bottom one is only 6 months, the other ones are over 2 years so we've got to change the scale mentally a little bit.

Kerry said: So that bottom one, the decline you can see in the purple is just it getting back to where it should be after it was installed. So there's a period of time once these things are installed that they need to do what they need to do to get back to where they were. So that's what we're seeing there. The reason we look at these is to make sure that we don't have dewatering issues causing settlement issues and Russell probably covers that a little bit more in his next slide.

Graeme said: Kerry where you're saying that on the top graph where they've started before it starts to decline, is that above the andesite?

Kerry said: No the andesite's above that.

Trevor said: That dewatering, does that affect the whole town or just that end, or is it all interconnected?

Russell said: The area around the open pit is interconnected. Favona area is in a different zone so dewatering of Favona didn't have a significant affect over Waihi East but Waihi East has primarily been dewatered already from the open pit. The only thing we're doing here with Correnso is it was like that (showing with his hands a steep slope) down to the open pit, now it's more like that (showing a much flatter line) because we've dewatered from the underground over on the other side.

Trevor said: But it doesn't affect the whole town.

Kerry said: And we can show you that shortly when we look at the survey markers which we do regular settlement checks on to make that nothing is moving.

Russell said: You mean in the south and west of town?

Trevor said: Yeah.

Russell said: South of town was dewatered with the open pit so this is the andesite below, we're not talking about the upper 100m where everybody lives, this is the bottom rock zone. To the west, this side of town, there's actually another barrier out there and there's very little effect at all of any dewatering out that way and same to the north. So it tends to be that side of town and that side of town.

Ruth said: With the piezometers, the fact that you're not showing the other piezometers (on the graphs on the powerpoint slide), I assume that they are stable?

Russell said: They are. Correct. It's these ones here you're talking about Ruth?



Kerry said: We don't show the graphs of them but they are doing the same thing but we don't have enough space on the slide.

Ruth said: Okay well it would have been nice to tell us that those other ones are stable.

Russell said: Yes.

Ruth said: So the only one that was not particularly stable is 101 and you think now it's stabilised?

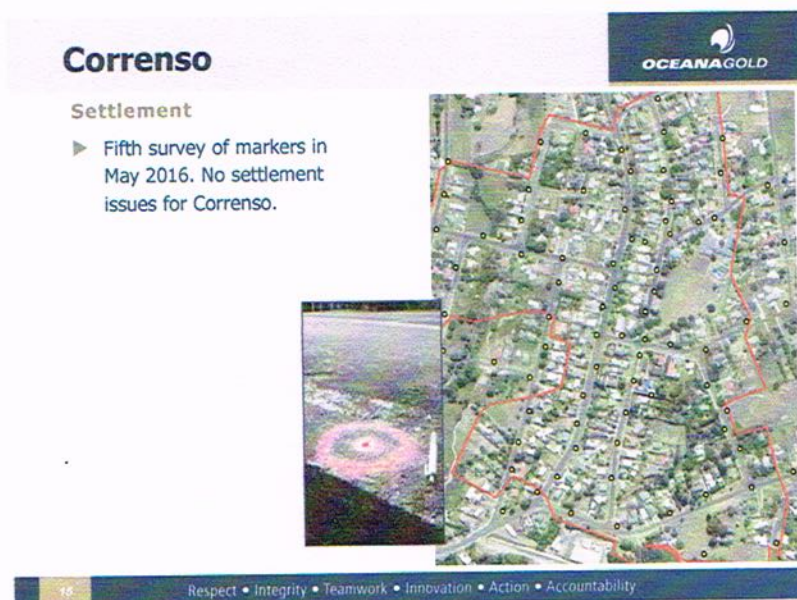
Russell said: It is apparent from that the lower level is stable.

Tim said: That (P101 line on the graph) starts at 16 November 2015, so it shows a year?

Russell said: Yes.

Kerry said: And we've bought that one up at every single community meeting, we've had just to show where that's going and what's happened and where it's at now.

Russell said: There's six more north of those ones but they've been in for quite a long time. These are the ones that were more recently put in place and they are stable.



They have just done the fifth survey of the settlement markers around town and there's been no settlement issues arise from any dewatering or workings at Correnso.

Ruth asked Russell to clarify what he meant when he talked about the angle of the de-watering (above).

Russell said: We originally dewatered from the open pit. So that forms what is called a cone of depression so you dewater the central area and everything drops down slowly towards it.

Tim said: This is important I think to clarify. You're talking about the level of (the groundwater from the) dewatering, you're not talking about the land surface?

Russell said: That's correct.

Russell said: Also we're not talking about the top 100m, we're talking about the area from the andesite and below. So this area here caused the ground water and the lower andesite to drop and so that has a certain effect out to here. What we've now done is we've moved our dewatering out to Correnso so that's drawn that area down so that it is level with the pit dewatering.

Ruth said: And you're saying there's no surface settlement issues as a result of that?

Russell: No, that's correct.



Ruth said: None whatsoever?

Russell said: The settlement issues Ruth are about relevant distance. So one of the big problems the council and everybody is always concerned about is if in one area of a section or a street there's a differential. So there's no differential settlement issues.

Ruth said: Right so just general settlement.

Russell said: Yes it's been as it always has been.

Tim said: Does land without mining go up and down?

Russell said: Yes that's the shrinking and swelling of clay that you often see for example.

Kerry said: It's particularly bad in some of the areas of Ngatea, the council probably knows a bit more around that, but the other one of those areas with reasonable peat soils and it gets wet and then it dries and you just get that normal movement.

Russell said: The other thing to remember here also is this whole area has already been dewatered once by the original miners to much deeper than we're going at the moment. When it was reflooded it doesn't actually go the whole way back up again so there's a phenomenon called secondary settlement. This area here has also been affected by the initial dewatering from the historic mine. We're actually dewatering it a second time and so it's not as significant as the original primary settlement.

Eric Schmidt said: The first one, how deep were they going?

Russell said: The first Martha mine went 600m down.

Kerry said: Well below where we currently are.

### **General discussion**

Ruth said: You had a very unfortunate accident underground, but we've had very little information about this. Is there anything else you want to share?

Kerry said: Not at this stage, only that it's something that's hit us as a mining group quite hard as well and it's not appropriate to start sharing that while investigations are still going.

Maggie said: So are investigations going on?

Kerry said: Yes, Work Safe and ourselves. It's hit quite a few people around the site extremely hard and we are working through that.

Kit said: We should probably just say that Work Safe could take up to a year.

Nancy said: Where to from here for Oceana? Are there any plans to surrender the consent prior to the end date?

Kerry said: No, not at this stage. Oceana bought this place to look at extending mine life. Kit talked about the amount of exploration we're doing at the moment just to see what we can do or whether there are opportunities or not.

Maggie said: Kit you talked before about not setting a precedent, but I thought that giving consent to mine under residential areas had set a precedent.

Kit said (previously): Each situation would be assessed on a case by case basis.

Tim said: Mark Buttimore have you got any thoughts about that? If for example, there has been a consent granted in the Correnso area whether that has an effect on the likelihood of future consents being granted.

Mark said: We are required to assess each consent separately on its merits. It is fair to say that the relevant experiences out of Correnso both from the company's point of view and the residents' point of view inform



the council's consideration. So if there was another Correnso consent would we have exactly the same conditions if it was granted? Most unlikely. There would be refinements to conditions based on events that have occurred. But because of the nature of mining and its depth and its extent and the mining methods, each consent definitely has to be assessed separately.

### Meeting process

Tim said: One of the things that we promised we'd come back to is the decision about there being one meeting and that one meeting being at 3pm. There was concern raised about whether that then stopped people from attending. What do you think? Are there people that aren't here because they have to work that you think we should make facility for? There's a balancing act between starting at 3pm and being done so that people can get home and feed their families versus starting at 5.30pm and cutting out that dinner time period. Have you got thoughts about what we should do in terms of when the meeting should be?

Graeme said: I had one thought, you're asking a question about people who possibly are not here because they're at work and are going to be excluded from any input into any decisions that are made about the timing of the meeting.

Tim said: I know from experience that this is a tricky subject to raise because we can factor the timing to suit people who may or may not come. The decision was made for there to be one meeting because we ended up with a 14/4 split in March. I think it's a better meeting if it's one meeting. Any questions about when?

Trevor said: I think you answered your own question. At the later one nobody turned up so maybe you've got your audience here.

David said: You need to try it for a couple of meetings anyway.

Ruth said: I recommend one meeting because it's 6-monthly. One meeting in the afternoon and the following one in the evening (any time after 5pm) and then at least there's an opportunity once a year to attend.

Graeme said: Yes one in the afternoon and one in the evening.

Ruth said: Well anything after 5pm. I would also like to raise the meeting venue.

Tim said: So we'll talk about that in a second, I'll remember that. So the possibility of doing 3pm and then 5.30pm, alternating between the two meetings on a 6-monthly basis? What do people think about that?

Kerry said: Are there people here that wouldn't make the evening or afternoon meeting?

Tim said: So we started at 3pm, it's now 4.55pm that's 2 hours, what if we went 4pm to 6pm? Does that help? People could just finish work an hour early?

Ruth said: I don't know that you would gain anything by that, it is either in work hours or it is not.

Eric Rhodes said: I feel that we've already been through that and people have said in the past you've had the evening meetings and only four people turned up. If you have this meeting in the evenings there'd be people here from the afternoon meeting that wouldn't make the evening meeting.

Kit said: So it is great that you folks are here, and yet there are many who aren't. What I propose is we put something in the Eastender and then we'll get people to respond that way. The Eastender goes out to 550 people. I don't want you making the decision for everybody. We'll put something in the Eastender and people can vote and we will go with the majority decision.

Tim said: So that's the process, it's going to go out in the Eastender, 550 people or so will be asked for feedback and the majority will rule as far as that's concerned. So the question is whether we have a daytime or evening meeting, just as simple as that?

*(General sound of agreement)*

Tim said: Ruth the second point you raised was about the venue, is there an issue?



Ruth said: Yes, because we all come from the east end which means we have to get ourselves here. There could well be people who can't get themselves here. If we want maximum participation we need to make it as easy as possible for eastenders and this is not as easy as possible I have to say. I nearly didn't come because it required me to make an effort to get here whereas I could walk down to the school, after school, which is our community hub I'm told, and use a room there.

Tim said: Is the alternative, the school?

Ruth said: Well I imagine it is.

Bev said: But you'd be interrupting the school, you'd have to ask the school first.

Eric said: If your neighbour has trouble getting here then you bring them.

Kit said: If you're really struggling to get here let us know and Donna or Jeanine will come and pick you up.

Ruth said: Perhaps you could put that in the Eastender.

Kit said: Absolutely. We don't want people to be disenfranchised because they can't find their way here but to be honest this is so much easier for us because we get to set it up early and it doesn't matter how long the meeting goes. We're more than happy to give you a ride and take you home again.

### Vibration workshop

Tim said: Who of the people here would attend the vibration workshop? So that was seven hands here and I don't know how many (have expressed an interest) that aren't here. Who hasn't already given their name to Jeanine? Four? Great we've got 11.

Tim said: Kerry and Kit and Russell thank you for the presentation. Your Worship thanks for coming. Everybody who's come and raised questions and expressed your point of view thank you very much.

**The meeting concluded at 5.00pm.**

Attendance Register	
B Powell	M & D Gilchrist
Nancy McGuire	Eric Rhodes
R Carrington	R Ordish
C Hallam	Helga Schmidt
Eric Schmidt	Sandra & Ferg Cumming
Dee Stevenson	Trevor Skinner
Robin Davey	Bev Ireland
Rita & Stuart Severn	Mark Buttimore
Dianne & Alan Purvis	John Tregidga
Connall Buchanan	Sonja Ireland