

# FOSTERVILLE GOLD MINE - ENVIRONMENTAL REVIEW COMMITTEE

2nd May 2017

## MINUTES

<b>Tour Undertaken at 9.30am</b>
<b>Attendance:</b> Tim Harrington Barrie Winzar Cr James Williams (COGB)
<b>Areas visited:</b> Tour included the site of the new ventilation shaft. Questions raised on tour: <ul style="list-style-type: none"><li>• Can you diffuse the vapour plume before it comes up as a white cloud? Response: This is an option that can be considered in the designs.</li><li>• Will there be a noise source after drilling has been completed? Response: Yes the fans will be a source of noise and engineering controls are currently being looked at to ensure we meet the noise limits for site.</li><li>• How long will the shaft last? Response: The shaft has been built with life of mine in mind. That is the reason for the size (diameter) of the shaft.</li><li>• Does the air flow reduce the inherent heat in the rock and if the air flow is turned off will the rocks remain cool? Response: the air will cool the rock surface itself but if removed the rock will reheat once again.</li></ul>

<b>Meeting Opened at:</b> 11:00am	<b>Minutes by:</b> Trudi Jackson
<b>Attendance: Chairman :</b> Clare Fountain Nick Tuohey - EPA Tim Harrington – Community Representative Ian Holland – Fosterville Gold Mine (FGM) Felicia Binks – FGM Trudi Jackson – FGM Erin Simpson - FGM Joseph Hughes- FGM Grant McFarlane (EER) Lynley Strachan (GMW) Bob Disken (EER) Barrie Winzar – Community Representative Morgan James (COGB) Cr James Williams (COGB) Lance Faulkner - FGM	<b>Apologies</b> Ashley Elliot – Goldfields Revegetation Jeff Cummins – Community Representative Alan Read  <b>Observers</b>

**Meeting Commenced:** Clare Fountain commenced the meeting and welcomed everyone. Clare also thanked the Community Representatives who volunteer their time to be a part of the ERC and we appreciate their efforts. Clare also thanked the committee for welcoming her to chair the meetings and provided an opportunity for each attendee to introduce themselves.

## **Minutes of the Previous Meeting**

**Moved: Tim Harrington**

**Seconded: Barrie Winzar**

Bob wanted clarification around why there are no action items listed in the previous minutes. If there are rolling actions it is important they don't get lost. Felicia responded that there were no actions from the previous meeting but this will be noted on future minutes so people are aware.

## **PROJECT UPDATES**

### **Ventilation Upgrade**

Ian Holland introduced Lance Faulkner who is assisting with the major ventilation upgrade. He added that the vent upgrade is an 18 month plus project which will cost upwards of 25 million dollars. Without the increased ventilation in the mine there would be a decrease in production which would ultimately affect the mines viability.

### **Presentation delivered by Lance Faulkner**

Grant asked why the designed fans couldn't be horizontal. Lance replied that FGM are still looking at the details and what the end point will be is still to be decided. Grant noted that a vertical set would result in louder noise to which Lance also replied that a volume of work is still to be done on what the outcome will be. Ian also responded that FGM won't skimp on investment as it is a Life of Mine project and we have a clear commitment to meet all requirements.

Nick asked what would be the distance from the fans to the nearest noise receptor with Ian advising it would be a couple of kilometres and the nearest residents are south of Daly's Hill.

Lance explained that the vents draw air in which creates a pressure difference and the underground ancillary fans move the air around. Lynley asked if the new fans can't be more underground for the purposes of sound insulation. Lance said if they were lower this may help with noise but would require more excavation and more surface disturbance. He noted that the noise specifications have been provided to the fan manufacturers so that noise attenuation options can be considered during manufacture.

Tim wanted to know going forward how regulators would assess noise given limits are currently set on background noise and this will increase with the ventilation upgrade. Nick stated that the fans will have to comply with current limits. Tim wanted to point out that there are no grey areas with the fans unlike the supply trucks on the Axedale – Goornong Road when putting on their breaks. He wanted documented in the minutes that years into the future when noise limits maybe reviewed that the fan noise would not be considered a static noise. Nick responded by stating fans will not be considered background noise and won't change these limits.

Grant said he was not familiar with a vertical setup but noted the elevation would make it harder to attenuate and lower down it will have better attenuation. This would increase the cost but would be worth the investment. Lance said the proposed set up would be a maximum of 10 m above the surface. Cr Williams asked if that would present maintenance issues to which Lance replied that the style of fans and the setup being on surface would make maintenance easier.

Barrie asked how much extension to the mine can occur with the current set up. Ian advised the currently we would have two years and with the proposed fans the systems life would increase to three years. After this time we would need additional upgrades such as a cooler on surface as the main limitations for the mine are around underground temperatures. The temperature underground increases 2 degrees Celsius with every 100m.

Without the ventilation upgrade the mine may still operate but it would be at a reduced scale and without the same investment.

Nick asked when the new upgrade was complete would that result in changes to the National Pollution Inventory. Felicia said not really as we are still operating the same amount of equipment and this is monitored annually. Ian Holland summarised the time frames around the ventilation upgrade.

The project will be done in 2 raises and be in place for the summer of 2018/19. The underground raise will be completed first and the site clearance will be completed by late this year. There is still the requirement of the regulatory approval to be obtained and the biggest risk is the regulatory approval path.

## **OPERATIONS REPORT**

**(As per Operations Report issued to members)**

### **Safety**

As per the report

### **Discussions**

Tim asked what is the nature of the rock stresses underground. Ian replied that the rock type has not changed and it remains a fair to good strength but the insitu stress has increased due to the depth of underground development. These stresses cause rock to squeeze and can cause some movement. Fosterville has a high standard of ground support to control this movement but essentially the stress is just a function of depth. Nick asked if the development will get narrower because of these stresses to which Ian replied that the controlling factor in the size of openings is the equipment. It is unlikely that we will see a change in the size of this development unless the ore body narrows.

Grant asked what types of ground support are used at Fosterville and if shotcrete and rock bolting were employed. Ian answered saying that rock bolts, mesh and shotcrete are all used. Grant then asked how many shotcreters are used with Ian saying it was 2 to 3 per shift.

### **Environment Report**

As per report and presentation

### **Discussions**

Ian emphasised the approval process time is critical for the mine. Felicia asked Nick if FGM passes the EIP audit onto the EPA for approval? Nick responded by saying Coliban Water filters it thought to the EPA.

Bob commented that the department has moved to a risk based approach to Work Plan Variations. The requirement is now to have a risk based consolidated work plan. The local EER officers are regulators only and Work Plan Approvals are not done locally now.

Ian stated that in our own view the communication for the management of change from late 2015 to now was not up to standard and all Victorian Industry is experiencing it. It has been an issue for FGM working with it and we don't know if it is going quickly enough. We have 2 fundamental projects hanging off approvals. We have been very clear on time frames and we will see what happens.

Grant stated if FGM have a schedule to adhere to forward a meeting request, there are also other avenues to escalate the matter. Ian added that we have tried to be transparent about implications if the time frames are not met. Felicia said that the new work plan makes it onerous on FGM to provide the risk assessment and all controls will be audited. Nick said it was up to the company to demonstrate how they reduce the risk.

Ian said the industry operates on a risk management approach and for the whole FGM site the risk is controlled and monitored. There have been change management problems around the whole process. Grant said if there had been good templates available it would have made it a lot better. Cr Williams asked if templates exist to which Grant replied that it's getting better. Ian concluded by saying the business model requires us to be much more engaged in this space.

#### Water Quality

As per report and presentation

Lynley asked how long FGM sampling of the Campaspe had been going on for? Felicia replied stating that a survey had not been done since the staged release from Johns Pit and that they may do the survey again in a few more years. Tim said it would be good to compare against the CMA survey. Barrie asked if there was much difference in the date between the survey points to which Joe responded by saying they were all pretty similar. Tim asked if the surveys were done in fenced off areas to which Joe said no. Tim stated the results could be better as a lot of areas are fenced off.

Lynley enquired about the depth of the 3 new bores. Erin said they were between 70 and 100m. Lynley then asked if they were a part of the aquifer injection project to which Erin said no. Bob asked why there was just now increased Zinc in one of the bores due to the Brass Fitting. Joe replied by saying that the corrosion may have been delayed or the bore may not have been purged properly.

Discussion was raised around the RSF3 bore monitoring increased As levels, with Felicia stating we believe that its location is within a highly fractured and mineralised zone. Bob also made mention that in pit tails facilities need back up when they fail.

#### Air Quality

As per report and presentation

Bob asked why the particular property south of the mine was chosen for air monitoring. Erin responded by saying it was in the recommendations from ACOM. It would be monitored at the same time as the existing location so results could be compared. Bob also asked if FA6 had been decommissioned and Erin said yes it had.

#### Noise

As per report and presentation

Erin provided an overview of the noise monitoring sheet from the exceedance that occurred during the quarter. Lynley asked if when the noise breach occurred was the wind speed recorded. Erin said not at the moment. Grant asked if any complaints from the community were received at the time of the breach? Both the EPA and ERR said none were received and Felicia advised that FGM had called residents to see if they had noticed anything different. Ian added that it is clear from the monitoring data that noise is very dependent of weather and our focus is reduce noise at the source. Temperature can also have an effect. Grant also noted that local noise attenuation projects can make a big difference.

#### Community

As per the report and presentation

#### Production Update

As per the report

#### Personnel

As per the report

#### Exploration

As per the report

Ian said that the FGM exploration strategy would provide a platform to know plans into the future. In the short term we are looking at a 2D Seismic Survey, given our drilling success it is our intent to devote more to regional investment and we want to convey this to the community. Bob noted that FGM do not have an exploration licence east of the river to which Ian responded that it is under a moratorium. Bob said it could be explored under contract with GSV. Ian said our plans will reflect that we have no licence in that area and we will discuss acquiring more land around Fosterville for exploration. Cr Williams asked if these are leases and not purchased to which Ian said yes.

Tim asked if the extended exploration licences that FGM are seeking would be more to the North with Ian replying that they would be North and South. The purpose of the two upcoming community meetings is to make people aware that FGM will be becoming more active. Tim stated that FGM would need to get the right people in the room. Nick then asked about the Aquifer Injection Community Meeting and what the general feel was around the meeting? Ian said it was very constructive and some good communication came out of it. There wasn't a high degree of anxiety. Tim said it was constructive and attended by those interested in the detail. One or two people had questions around what happens if it goes wrong but in general it was well attended and there was a good level of respect. The key thing was that the monitoring bore had to hit the aquifer that was being injected into to which Ian agreed. Bob stated it was good that GMW attended with Tim adding that Brendan is well regarded in the community.

Grant had a question about the site water balance and given we have had the wettest April since 2011. Has this balance been affected? Ian said no it hasn't. The rain would impact the Harrier fill rate long term but in short term there are no immediate impacts.

### **Rehabilitation Report**

As per the report

Bob asked what numbers of seedlings are being planted to which Felicia said Ash works this out for us and the areas are under discussion.

## **OTHER BUSINESS**

### **Mining Licence Update**

Bob enquired about an update on the new licence application. Ian said the drive is now at the edge of our current licence. It is to continue to the west to join the current decline; some of this drive would be in the new mining licence and is the only activity planned, with zero surface impact. Bob then clarified that this is 700m below surface. Ian then added we have had a significant challenge with the Dja Dja Wurrung and this is the next step in the process of the approval. Felicia said it had been 6 months of not much communication from the Dja Dja Wurrung.

### **Other – Action Items**

Tim has requested a meeting with Ian Holland in regards to the historical tailings

Map of Noise monitoring Locations to be included in Operations Report

An update to be provided at the next ERC on the Exploration Community Meetings

**Meeting Closed: 1-00pm**

**Next Meeting: Tuesday 1<sup>st</sup> August**

Meeting Dates for 2017- 8<sup>th</sup> November.