



Stawell Gold Mines

Environment Review Committee Minutes

11 February 2025



ERC MEETING AGENDA

1. Open Meeting_____Kieran Murrihy
2. Apologies, Previous Minutes and Actions_____Kieran Murrihy
3. Environmental Report_____Cameron Hope
4. SGM Operations and Community Update_____Cameron Hope
5. Future Capacity Building Presentations/Activities_____Kieran Murrihy
6. Regulator & Council Update_____ERR, EPA, NGSC, DELWP, WCMA
7. Other Business_____Kieran Murrihy
8. Next Meeting - Date and Agenda_____Kieran Murrihy

1. OPEN MEETING

1.1 Attendees

ERC Members	Margaret Taylor, Geoff Stratford, Kate van Dyck, Rosalind Byass, Peter Mueller
SGM	Cameron Hope (Manager – Environment & Community), Annie McPherson (Community Engagement Officer), Stephanie Koziol (Community Engagement Officer), Peter Gross
Regulators	Alex Wells (EPA), Glenn Kilburn (ERR), Timothy Lubcke (ERR), Denise Sumper (NGSC)
Chair	Kieran Murrihy (Foresight Lane)
Minutes	Sarah Marriott (Foresight Lane)

2. APOLOGIES, PREVIOUS MINUTES AND ACTIONS

2.1 Apologies

Patrick Kennedy (NGSC), Teresa Arnup (NGSC), Stephen Fielding, Bryana Bisset (WCMA), Liz Beever (DELWP).

2.2 Previous Minutes

The Minutes from the previous meeting, 12 November 2024, were circulated to ERC Members. No attendees had comments or concerns with the Minutes.

2.3 Review of Previous Action Items

There were no actions from the previous meeting.

3. ENVIRONMENTAL REPORT

Stawell Gold Mines (SGM) presented a slide-deck for the Q4 2024 Environmental Monitoring Results. Drawing on the ERC Environmental Notes, the slide-deck focused on Dust, Groundwater, Noise, Blasting, Hydrogen Cyanide, Complaints, Environmental Incidents, Regulatory Notices and Operations update. (see Table 1).

Table 1. Summary of Environmental Aspects and Compliance Status

- Fully compliant with criteria.
- Irregular or isolated event. Requires further investigation and actions if applicable.
- Exceedance of criteria requiring action.
- Not monitored during reporting period.

Aspect	Monitoring	Status	Comments
Air Quality	Dust deposition		Compliant
	AAQMS		Compliant only non-mine related peaks
	Hydrogen cyanide		Compliant
	Emissions		LoR was greater than Nitrogen oxides prescribed limit
Blasting	Site		All blasts below 100 th ile limit of 10mm/sec. 4 blasts above 95 th ile limit of 5mm/sec.
Noise	Site		Elevated readings at North and East. No complaints from nearest receivers.
Water	Offsite bores		No new exceedances. Compliant with HSC drawdown metric.
	Offsite farm dams		Compliant
	Offsite creeks		Compliant
	Freeboard		Compliant
Flora and Fauna	Site		Compliant
Incidents	Site		8 environmental incidents reported.
Regulatory Notices	Site		No regulatory notice in force.
Community	Complaints		8 complaints were received.

3.1 Real Time Air Quality Monitoring

Figure 1: Real Time Air Quality Monitoring Map



All mine related emissions were within their respective 24h guidance values for PM_{2.5} and PM₁₀. Spikes in readings (see figure 2 and 3) were caused by bushfire activity in the Grampians National Park.

Figure 2. 24 PM 2.5 Averages

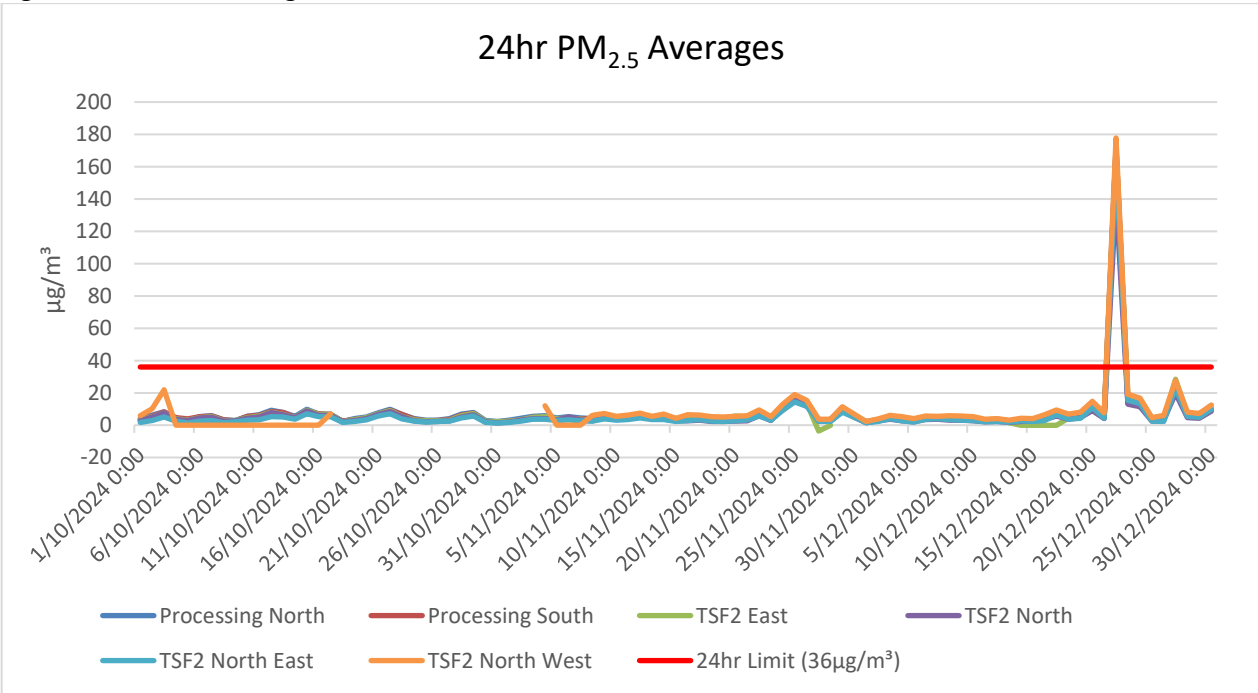
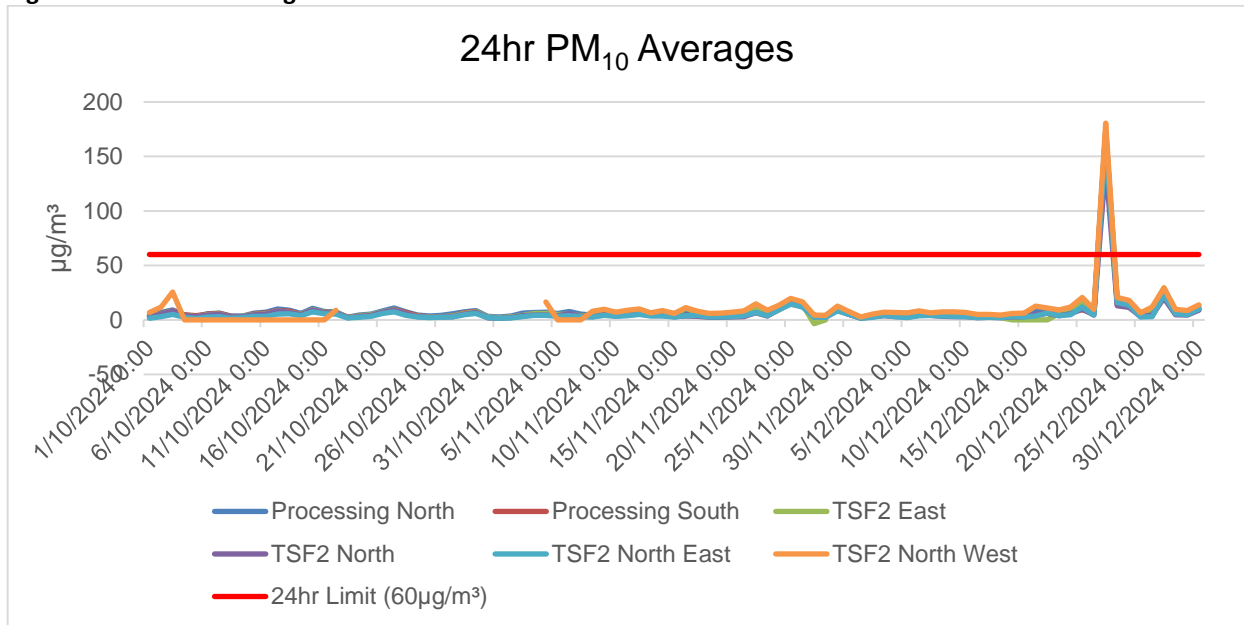


Figure 3. 24 PM 10 Averages



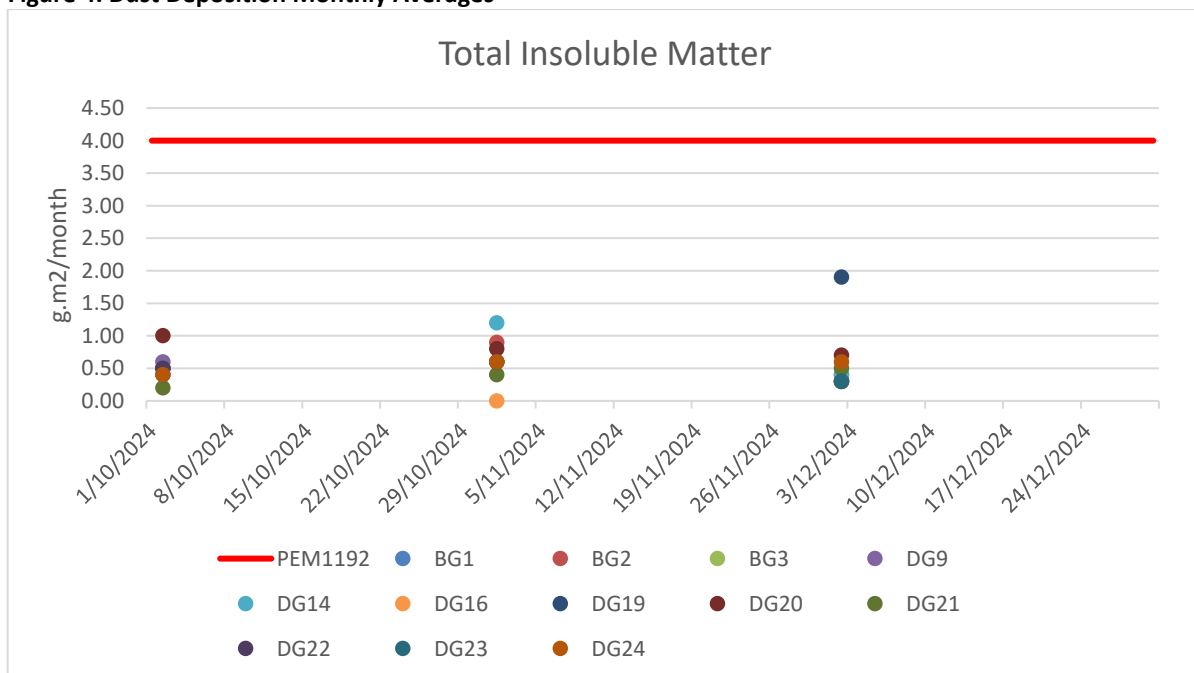
The Dusk Risk Report received by SGM staff each morning was shared with the ERC. It was noted that it is a very effective and accurate tool that allows staff to plan for any potential risks that may occur in a 3-day window. In responding to a question SGM advised that they have been using the tool for around 8 years.

It was also noted that the TSF Operators have done an extremely good job during a very dry and windy summer to ensure that no elevated readings occurred during Q4 and no off-site issues were recorded. This was done using a combination of tools i.e. dust suppressant, water cannon, water truck.

3.2 Dust Deposition

Dust deposition results showed one elevated reading in DG19. The contamination was caused by Christmas Beetles. In responding to a question SGM noted that on average, around 1.5 of the 12 dust gauges would be contaminated each month. The real time air quality monitors are obviously the most effective tool for monitoring air quality and responding in a timely fashion. The gauges that are collected on a monthly basis form part of compliance measures and help build an understanding of the overall patterns over time.

Figure 4. Dust Deposition Monthly Averages



3.3 Emissions Monitoring

Emissions monitoring was conducted by Ektimo on 13 October 2024. All results were below the gaseous emission standards. Table 2 & 3 show Q3 2024 monitoring results that were not available until after the Q3 ERC meeting.

Nitrogen Oxides at Vent shaft No. 4 showed LoR greater than the point source limit, therefore half LoR was adopted for reporting purposes.

Table 2. Gaseous Emissions Monitoring – Vent Shaft 4

Date	Mass Rate (g/min)		
	Carbon Monoxide	Nitrogen Oxides (as NO ₂)	Sulfur Dioxide
15 th October 2024	<20	<30	<50
Point Source Limit	N/A	26	55

Table 3. Gaseous Emissions Monitoring – Mill Afterburner

Date	Mass Rate (g/min)		
	Carbon Monoxide	Nitrogen Oxides (as NO ₂)	Sulfur Dioxide
15 th October 2024	9.2	3.4	<0.09
Point Source Limit	75,060	511.2	978

3.4 Groundwater

The most recent sampling event at SP585 recorded a Thiocyanate concentration of 270 mg/L, consistent with previous monitoring rounds. Ongoing groundwater monitoring will continue to establish trend lines for SCN concentrations at this bore.

The 2024 Mann-Kendall Trend Analysis, using data from March 2018 to present, indicates an increasing trend in Thiocyanate at SP585. However, this remains the only offsite bore with concentrations above detectable limits. Past trends have included "Increasing," "Probably Increasing," and "No Trend."

The most recent sampling event at SP585 shows a decrease in Total Cyanide concentrations, recorded at 1.58 mg/L, compared to previous results. Since 2016, concentrations have remained relatively stable, ranging between 0.02 and 0.42 mg/L. The investigative team, led by AECOM, now has 3 quarters worth of data and SGM are hopeful they will receive AECOM's report in the next month or two. The EPA and EEEV have been informed and are being updated on the progress of the investigation. SGM anticipates it will be able to provide an update on the report and any findings at the next ERC meeting.

3.5 Noise

Noise monitoring was conducted by SGM during November in Q4. Noise level emissions during the day period were compliant with site noise level guidance values at all monitored locations. Noise level emission during the evening period were compliant with site noise level guidance values at the South and West locations but not at the North and East locations. Noise level emissions during the nighttime period were compliant with site noise guidance values at the South and West locations but not the North and East locations.

A follow up was conducted as per SGMs Trigger Action Response plan. No abnormal works were reported by process management and the closest receptors reported no unusual or nuisance noises. Community consultation was conducted with those nearest the receptors and there was not an unusual or nuisance noise reported.

When asked if noise detection is recorded more regularly in these areas, compared to other locations, SGM stated that it was and that it was due in part to the topography of the areas (eg. downhill.) When questioned if the source of the noise was always the same SGM explained that the causes are varied, and that they look to find remedies as issues emerge. It is important to reiterate that SGM was compliant at all locations.

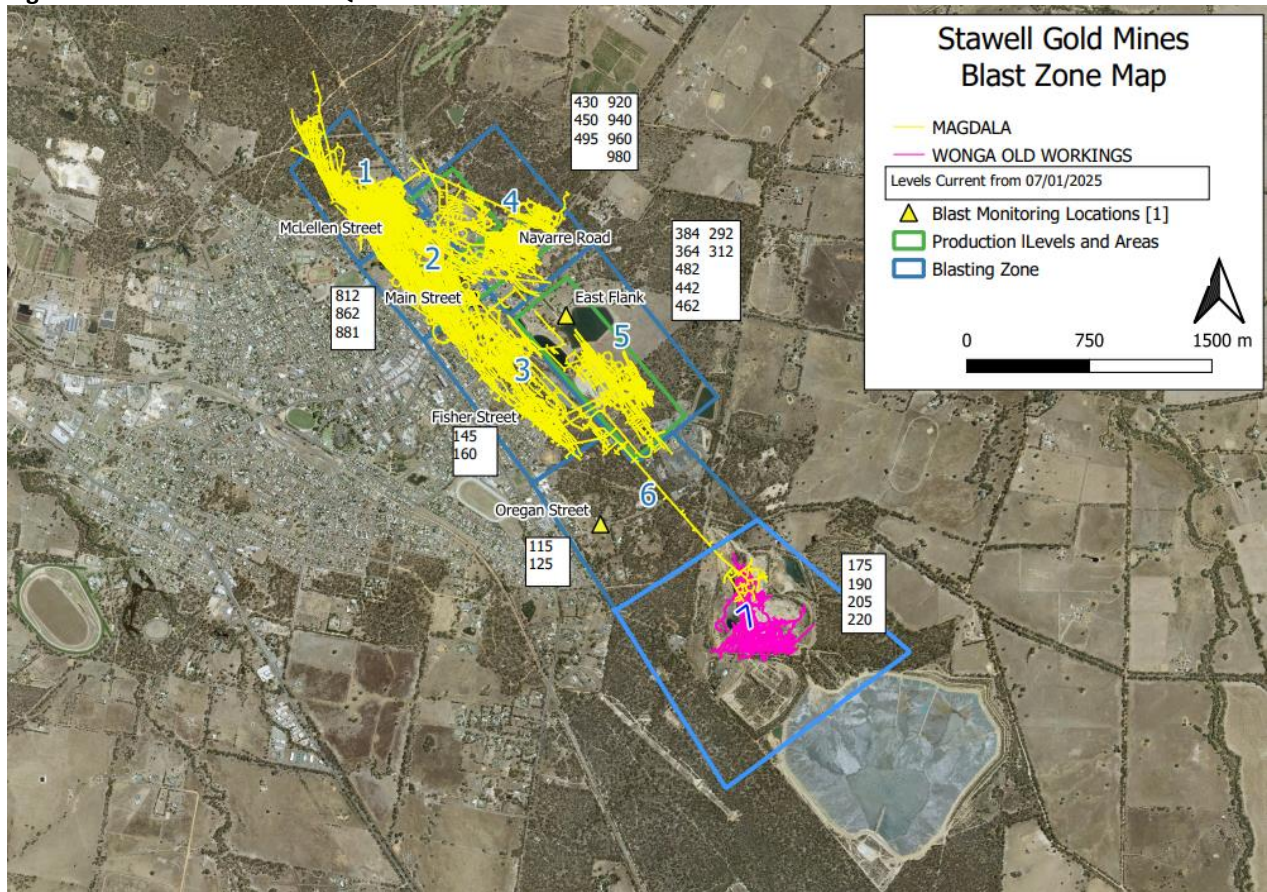
SGM reported that Dr. Norm Broner conducted his annual independent 'Audit of Conduct of Noise Level Measurements' during November 2024. Dr Broner confirmed post the audit that he was "...satisfied that the noise level measurements are being conducted appropriately and for the purposes of showing compliance with the appropriate Noise Limits."

Table 4. Q4 Noise Monitoring Results

Monitoring Site	Day (07:00 to 18:00)	Evening (18:00 to 22:00)	Night (22:00 to 07:00)
Limit (LAeq)	50 dB	44 dB	39 dB
West	Mine Not Audible	Mine Not Audible	Mine Not Audible
South	38	Mine Not Audible	27
North	45	46	45
East	46	47	45
North 2	-	38	45
East 2	-	42	33

3.6 Production Area

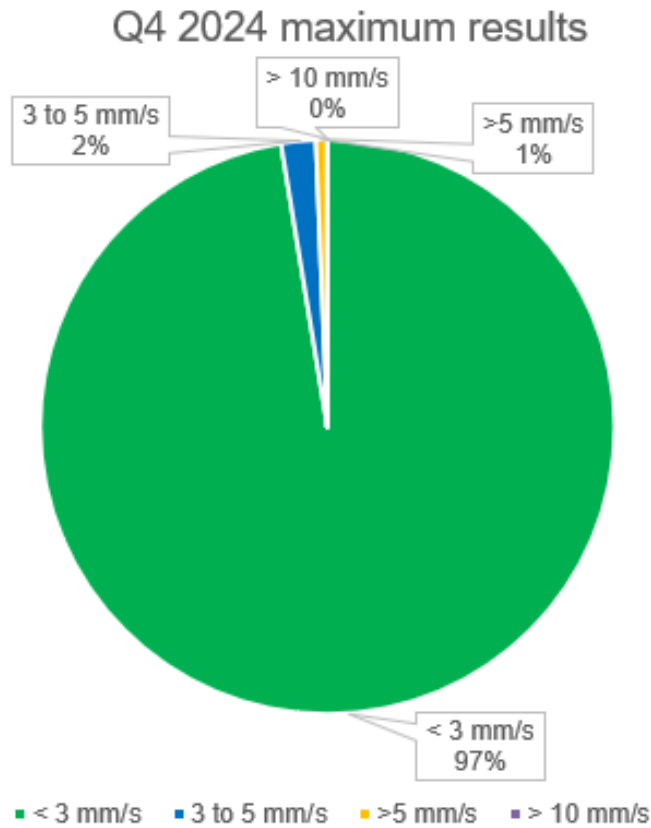
Figure 5. Production Area for Q1 2025



The map outlines the production areas for the next quarter, showcasing an extensive underground footprint. Production will commence in area 7 for the first time in Q1.

3.7 Q4 Blasting – Firings Graph

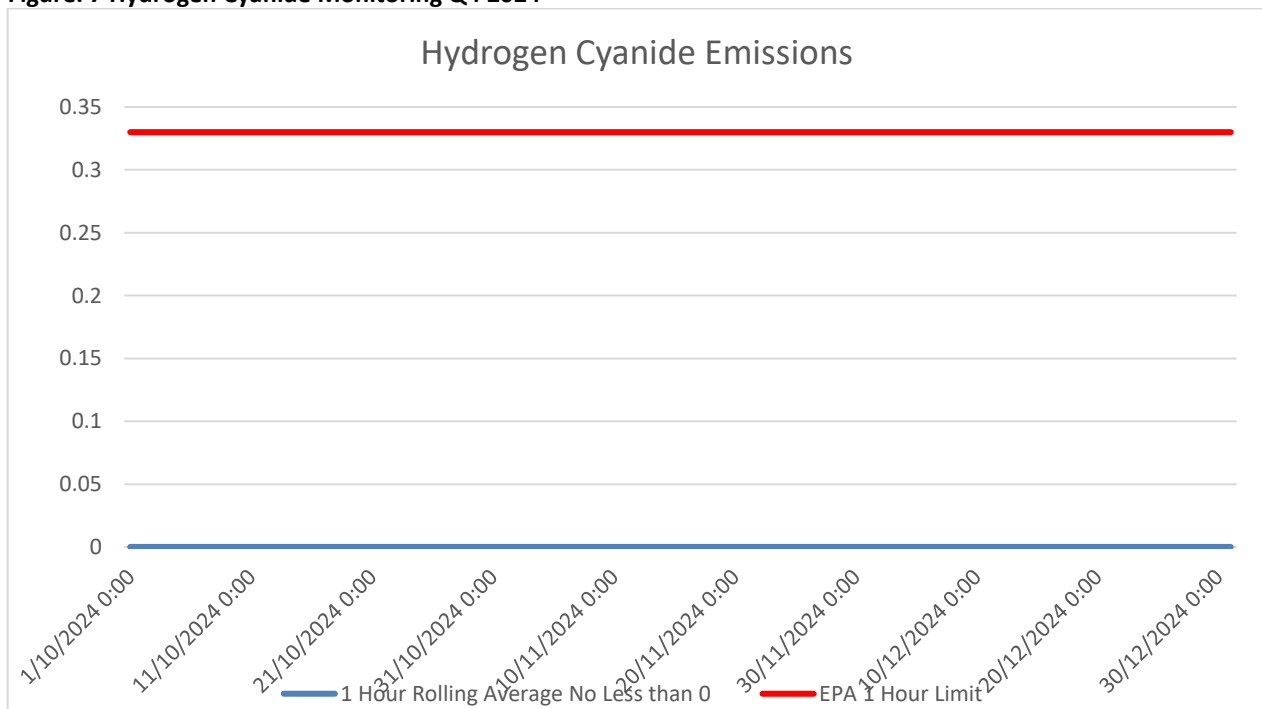
Figure 6. Vibration Results (1/10/24 – 31/12/2024)



All readings were below the 10mm/sec absolute limit requirements.

3.8 Hydrogen Cyanide Monitoring

Figure. 7 Hydrogen Cyanide Monitoring Q4 2024



SGM's Hydrogen Cyanide readings showed no detections throughout the monitoring period.

3.9 Complaints

There were eight community complaints during Q4 2024.

Blast

- Seven complaints related to blasting noise and vibrations were received. The SGM Environment and Community team has been working closely with community members to address any queries or concerns. All complainants are known to SGM. The response has included providing additional information to complainants prior to every blast in sensitive areas, modifying blast duration and installing additional monitors in area/s of concern. Blasts remain compliant.

Misc

- There was one complaint received regarding signage being left out after hours. The sign was removed immediately and the complaint closed out.

3.10 Environmental Incidents

There were eight environmental incidents during Q4 2024.

- **SGM006012:** Equipment Failure – Data Loss (02/10/2024)
 - Moderate.
 - HCN monitor found without power.
 - Lost data from secondary monitoring location. Data still available from primary and backup locations.
- **SGM006013:** Fauna – Interactions (02/10/2024)
 - Negligible.
 - Guano in dust sample jar at background monitoring locations BG1, BG3.
 - Contamination leading to data loss.
- **SGM004035:** Spill - Overflow (14/10/2024)
 - Negligible.
 - Effluent overflowed up from septic manhole cover inside the Met Lab.
 - Spill contained within the building and tank pumped out by the waste contractor.
- **SGM006015:** Equipment Failure – Data Loss (04/11/2024)
 - Moderate.
 - HCN monitor was found without power. An investigation discovered that the supply of faulty batteries resulted in premature shutoff.
 - New batteries were purchased and the equipment sent for repair as a precaution.
- **SGM006017A:** Equipment Failure - Data loss (11/11/2024)
 - Moderate.
 - Fisher Street Blast Monitor did not record vibrations from two firings on the 11/11/2024 @ 17:53 & 15/11/2024 @ 17:51.
 - It was replaced with a portable monitor and the faulty one was sent for repair.
- **SGM006019:** Elevated noise results (12/11/2024)
 - Minor.
 - During the quarterly monitoring elevated noise readings were recorded at the northern & eastern monitoring locations.
 - TARP activated, nearby residents contacted and no complaints were received.
- **SGM002485:** Spill (22/08/2024)
 - Negligible.
 - Fuel overflowed from vent on bulk tank in fuel truck during filling. A small amount of fuel ran onto the tray and dripped onto the hardstand- estimate <5L.
 - Diesel was cleaned up with sand/absorbent material which was disposed of. Vehicle was parked on bunded area to catch further leaks prior to repair.

- **SGM006020:** Equipment Failure - Data loss (11/11/2024)
 - Moderate.
 - Fisher Street Blast Monitor did not record vibrations between 17:30-18:30 on 20/12/2024.
 - Supplier contacted to rectify the issue.

3.11 Regulatory Notices

There were no new regulatory notices issued and the previous notice is no longer in force. SGM has continued to meet the requirements of the previously issued PAN. An annual review of the hydraulic containment system has been completed, assessed by an EPA-appointed auditor, and submitted to the EPA.

4. STAWELL GOLD MINES OPERATIONS UPDATE

4.1 Rehabilitation and Community

SGM had consultants on site in early February to complete assessments for vegetation density. These assessments will be used to inform some of their closure planning works that form part of their overall rehabilitation plan.

The plan for planting out the Davis Pit rehabilitation area will change moving forward. SGM staff have been working with local nurseries to source suitable native plants that sit within the site's vegetation communities. These plantings will form part of the larger scale rehabilitation plan moving forward. New plantings will start in May, with further plantings scheduled for next autumn.

The Wonga backfill remains ongoing, with over 1 million cubic metres being moved into the pit to date. The escapeway has been installed and SGM are also carrying out rehabilitation works around the portal which sits at the bottom of the pit. It is going to be used as an air intake that will feed air into the Wonga mine.

SGM staff continue to work with the new committee at the Stawell Clay Target Complex. They have undertaken a considerable amount of work over the past few months - spraying, rubbish collection, full electrical upgrade, groundskeeping and fencing work.

SGM have formed a partnership with the World Gold Council which has seen them gain sponsorship for the three Stawell primary schools and the secondary school. SGM secured \$15,000 for each school to support various initiatives (eg. breakfast club programs). \$15,000 was also secured for The Cottage, a local organisation who supports people in need in the Stawell community.

It was also noted that through their Community Grants program SGM has supported many grassroots activities and has put over \$200,000 back into the local community. They are proud of the impact these grants have had over the past 12 months. ERC members are reminded that they can promote these grants to organisations that might be interested in applying.

A 3D image that showed the mine's underground workings was shown and explained to the ERC. It was asked if SGM could share a screen grab of the active side of the mine with Kate van Dyck to be used in the Information Centre. This will be investigated.

Action 120225.1 – *Cameron Hope to share a screen grab of the active side of the mine with Kate van Dyck if possible.*

Geoff Stratford asked if he could have a laminated version of the Q1 Blast Area Map. SGM will also post the map on their socials and Basecamp.

Action 120225.2 – *SGM to provide Geoff Stratford with a laminated version of the Q1 Blast Area Map. The map will also be posted on SGM's socials and Basecamp.*

SGM were asked to provide and update on the SUPL Lab and how the relationship is working between the Lab and SGM.

It was noted that the relationship is good and all is working well. There are two full-time staff on site and a number of academics are coming on site at different times to work in the Lab. A number of experiments are currently taking place.

The Chair stated that a Lab update was provided at the November 2024 ERC Meeting and that further information can be found in the November minutes.

SGM will invite the SUPL Lab Manager to attend the May meeting to provide an update about what activity has occurred in the Lab during the past six months.

Action 120225.3 – SGM will invite the SUPL Lab Manager to attend the May meeting to provide an update regarding the activity currently happening in the Lab.

5. FUTURE CAPACITY BUILDING PRESENTATIONS/ACTIVITIES

The Chair made a recommendation that each of the ERC Regulators make educational presentations around their role and their working relationship with the mine at future ERC meetings. ERR agreed to present at the May meeting, the EPA at the August meeting and NGSC at the November meeting.

6. REGULATOR UPDATES

6.1 Environmental Protection Authority (EPA)

The EPA advised that they will organise a time with SGM in the coming months for a site visit to review and discuss the supply containment network report they received last year. Off the back of the visit EPA and SGM will be able to formulate a 'next steps' plan.

6.2 Earth Resources Regulation (ERR)

ERR advised that there had been a recent audit of SGM operations in relation to the Tailing Storage Facility and the Emergency Response Plan. The Audit was overseen by ERR Principal Geotechnical Engineer who was satisfied with, and complimentary of, operations.

6.3 Wimmera Catchment Management Authority (WCMA)

No report was given by WCMA as there was no one in attendance.

6.4 Department of Energy, Environment and Climate Action (DEECA)

No report was given by DEECA as there was no one in attendance.

7. NORTHERN GRAMPIANS SHIRE COUNCIL (NGSC) UPDATE

NGSC reported that they have nothing active with SGM at the moment and added that they are also undertaking work at the Stawell Clay Target Complex.

8. OTHER BUSINESS

SGM were asked if they had provided assistance to their 'neighbours' affected by the bushfires in the Grampians National Park. SGM said that they provided funding and support to the Pomonal CFA last year post their fires and they encouraged the ERC to remind any groups or organisations in current need of assistance to contact Cameron Hope directly, as they may be eligible for support through SGM's Community Grants Program.

9. ACTION ITEMS AND NEXT MEETING

9.1 New Action Items

Action number	Action item
120225.1	Cameron Hope to share a screen grab of the active side of the mine with Kate van Dyck if possible.
120225.2	SGM to provide Geoff Stratford with a laminated version of the Q1 Blast Area Map. The map will also be posted on SGM's socials and Basecamp.
120225.3	SGM will invite the SUPL Lab Manager to attend the May meeting to provide an update regarding the activity currently happening in the Lab.

9.2 Next Meeting

Next meeting is at 2.00pm on Tuesday 13 May 2025. The meeting will be held at the Stawell RSL.

Any members wanting to attend online should contact the Chair and Cameron Hope in the lead up to the meeting.