

DISCUSSION AGENDA & MINUTES

PREPARED FOR: Community Consultation Group Meeting

Attendees		Apologies
Ken Norman (KN) Ian Dickinson (ID) Geoff Fairhead (GF) Graham Steel (GS) (Alternate for GP) Kim Bennett (KB) Pamela Makar (PM) Simon Duncan (SD) (Alternate for FP) Keith Muller (KM) Sue Leighton (SL)		Fiona Philson (FP) Gavin Pollock (GP)
Date	Time	Location
14.11.19	08:00	Galaxy Exploration Office – Ravensthorpe

2 WELCOME

- Ken Norman (KN) opened the meeting.
- KH did a very quick introduction of who he is and his Role at Galaxy as the New HSEC Manager.

3 APOLOGIES

- Fiona Philson (FP)
- Gavin Pollock (GP)

4 DECLARATION OF CONFLICT OF INTEREST

- No conflicts of interest were identified by CCG members.

5 CONFIRMATION OF THE PREVIOUS MEETING MINUTES

- September 2019 CCG meeting – All members confirmed previous meeting minutes with a few administrative errors identified for correction.



6 ACTIONS ITEMS AND OUTCOMES

- Previous meeting actions that have been closed will remain on the below list for succeeding meeting before being removed.
- Actions below summarize commitments made during the meeting.

Date Raised	No.	Action required	Who	Date due	Action Outcomes
12/09/2019	41	Provide transitional material for RHS to fix up damage done to Hawkes Nest site and block tracks and as a base material for the new road access.	Galaxy		Open- waiting on RHS for when the material is required. Delays were encountered by RHS and material will not be required until the new access route has been determined. Galaxy's assistance will only be required for one day as all material will be tipped on this day for the road development work into Hawks Nest.
12/09/2019	42	Provide map with DDG and Hi Vol location to CCG members	Galaxy	Closed 30/09/2019	Attached with November Minutes
12/09/2019	43	Organise a meeting with key stakeholders (RAIN, SoR) regarding a discussion on Post Mining Land Use and rehabilitation of the waste dump and in pit TSF.	Galaxy		Open
12/09/2019	44	Provide a post to go on the SoR Face Book page that connects to the CCG minutes already located on the Shire website.	Galaxy/SoR	Closed 13/11/19	Closed 13/11/2019
12/09/2019	45	Provide water data results to Jen Chambers regarding section of Cattlin creek where water is seeping.	Galaxy	Closed 3/12/19	Provided 14/11/2019. Discussion held around monitoring results with the CCG. A later meeting was organized with Jenny chambers regarding water analysis and monitoring undertaken for Cattlin Creek.
14/011/2019	46	Provide a slope rehabilitation plan for the south face of the waste dump, this will include a timeframe of what is expected to occur and when.	Galaxy		
14/011/2019	47	Ecotoxicology Studies on Dust and Water (Prof Barry Noller)	Galaxy		



Date Raised	No.	Action required	Who	Date due	Action Outcomes
14/011/2019	48	Monthly Environmental and Community Report	Galaxy		
14/011/2019	49	Notify property owners on the outcome of the housing inspections	Galaxy		
14/11/2019	50	Slashing of weeds along the road verges of the diversion.	SoR		
14/11/19	51	Organize school visit for Ravensthorpe school	Galaxy/ RDHS		

7 ADMINISTRATIVE ITEMS

- CCG members can invest in GXY shares with no conflict of interest.

7.1 Galaxy Progress Report Dust monitoring results:

7.1.1 Dust monitoring:

New results for dust monitoring have been received for both the Dust Deposition Gauges (DDG's) and Hi Vol sampler.

DDG's- (measures deposited dust):

The dust deposition gauges allow Galaxy to assess potential dust nuisance and amenity impacts upon the local community. As there are no relevant regulatory criteria in Western Australia for acceptable dust deposition levels, the dust deposition criteria adopted by the NSW EPA (2017) have been applied as Galaxy's performance target. All results for the Community Dust Deposition Gauges, bar June and August 2019, have been below the standard of 4 grams/m²/month (ash Content) and the overall monthly average is below the performance target of 4 g/m²/month see Figure 3. The control DDG (DDG20) has been included as a reference site, however, is located 20km NE of the Mt Cattlin Mine Site in a farmer's paddock and has an overall monthly average above the performance target of 4 g/m²/month (12 g/m²/month), see Figure 1. DDG8 was reinstated on the 30 April 2019 and data collection has recommenced. DDG8 and DDG9 have been labeled to inform the public what they are and hopefully prevent future damage.

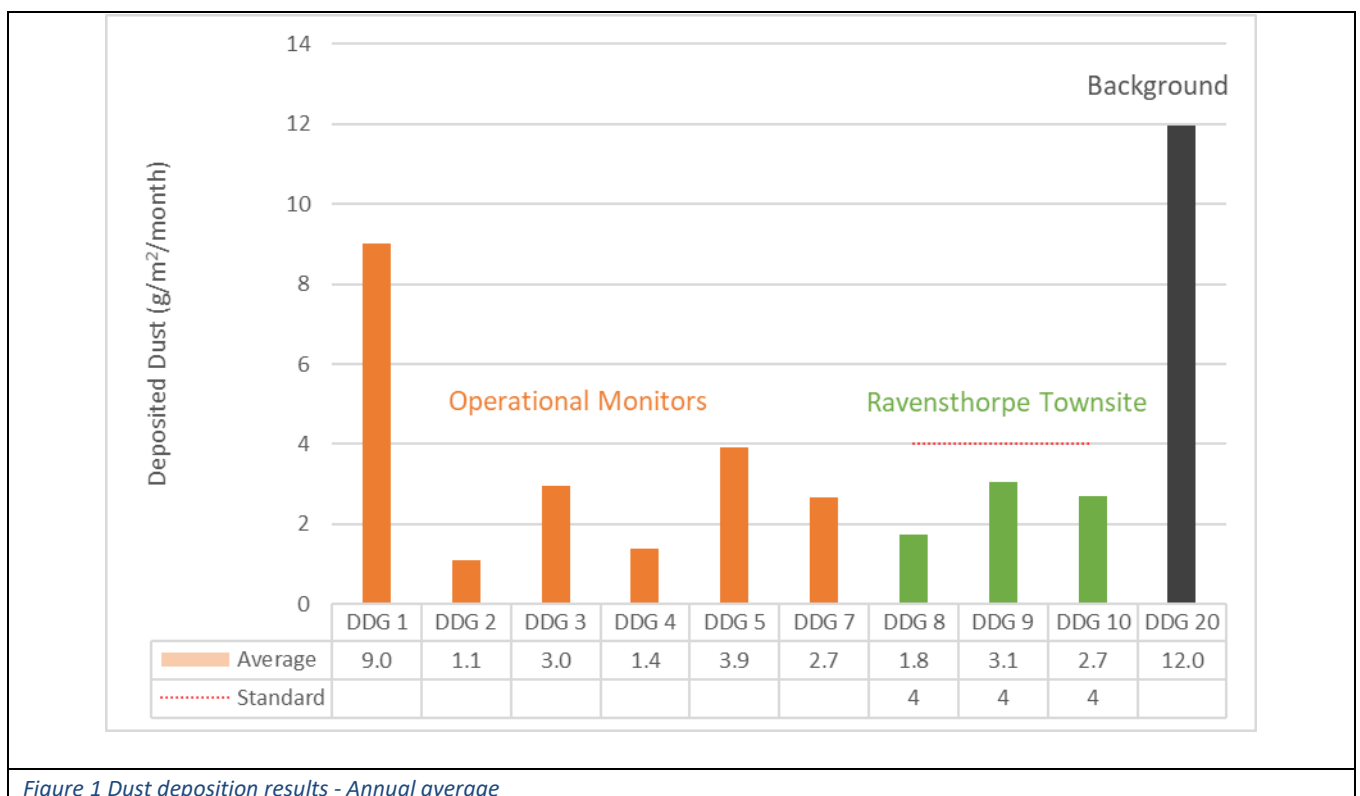


Figure 1 Dust deposition results - Annual average

Community Monitors - Insoluble Matter g/m²/Month

by DDG No.

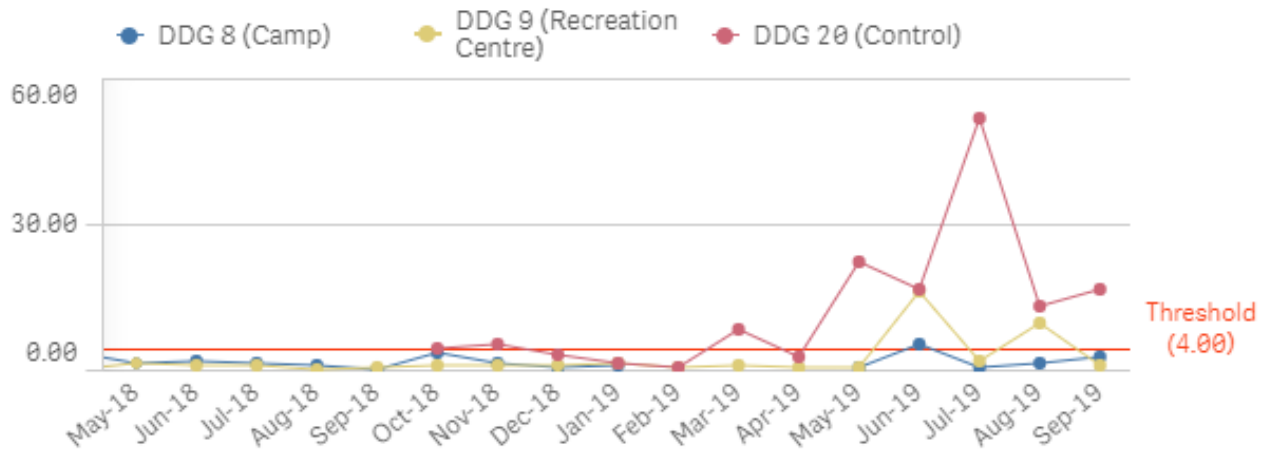


Figure 2: Insoluble matter is everything collected in the gauge (<1mm) that is retained on the filter as per AS3580.10.1 which is the Australian Standard the sampling and analysis is conducted to.

Insoluble matter deposited at the community monitors DDG8 and DDG9 and the control site DDG20.

Community Monitors - Ash Content g/m²/Month

by DDG No.

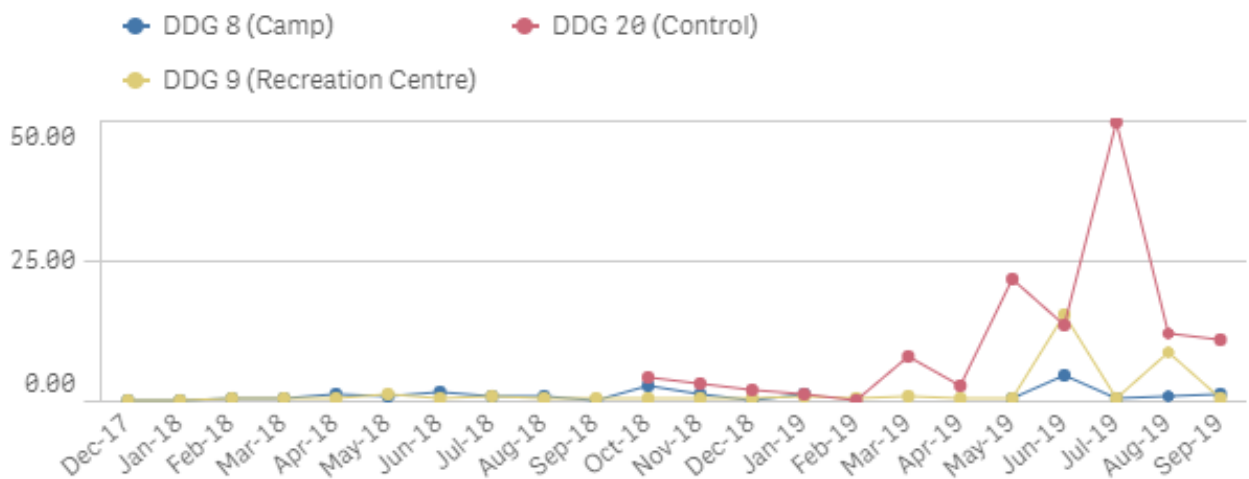


Figure 3 After the Insoluble result are obtained the filter is then ashed at 850 degrees and this produces the ash result. The ash result is essentially only the heavy mineral matter with any organic matter or volatiles reported as combustible.

The overall monthly average for both DDG8 and DDG9 is below the performance target of 4 g/m²/month.

The dates recorded on the horizontal axis indicate the month the sample was collected; results are calculated over the recorded sampling periods to give results in gm/m²/month. The control DDG (DDG20) has been included as a reference, however this DDG is located 20km NE of the Mt Cattlin Mine Site in a farmer's paddock. DDG20 has exceeded the performance target consistently throughout the reporting year, with no influence from Mt Cattlin mine.

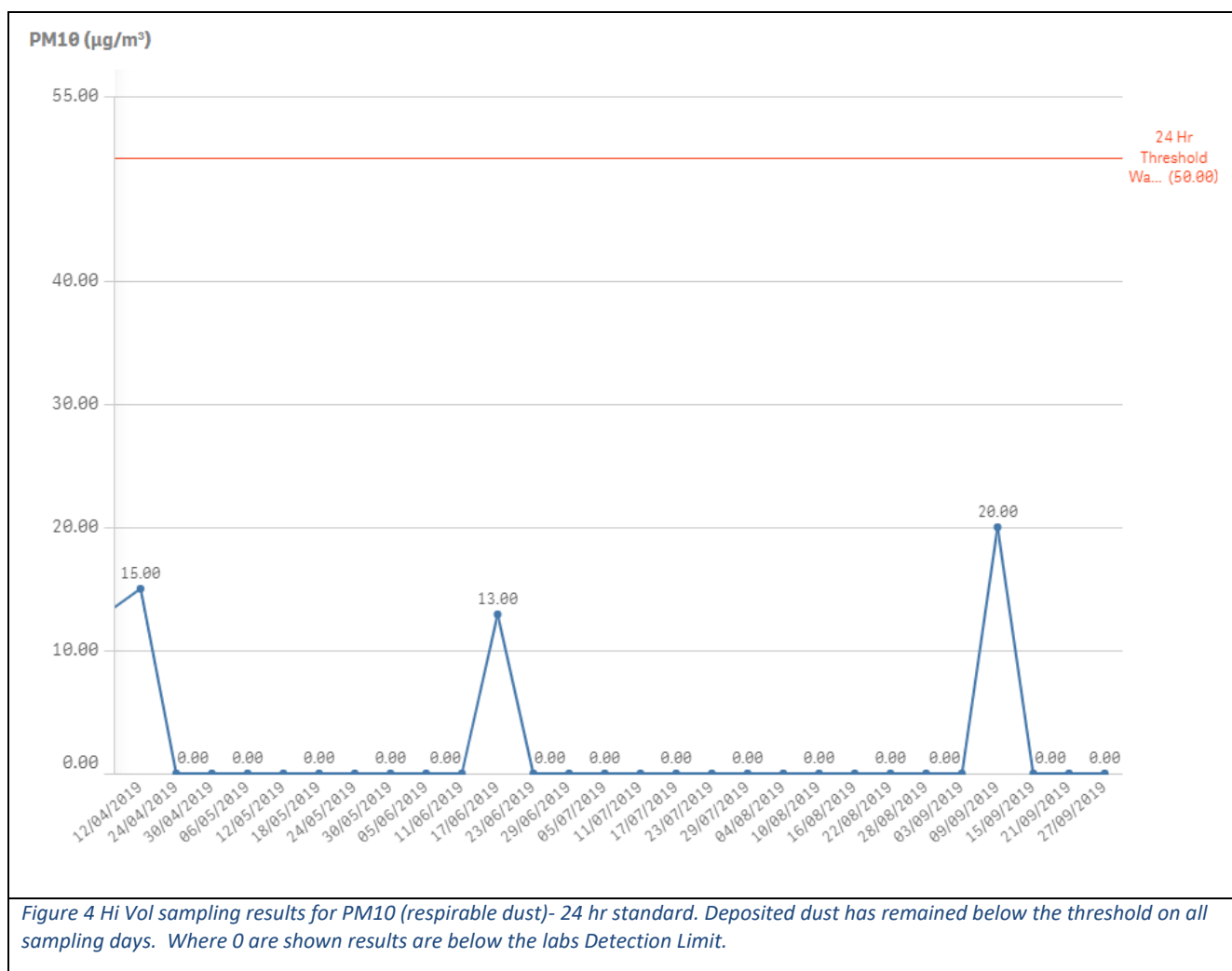
Dust gauges are made and positioned and monitored to ensure compliance with AS/NZ Standard, AS3580.

7.1.2 Hi Vol Sampler- (measures respirable dust)

The below graphs show assay results for the Hi Vol sampler for PM10 and selected metals. The Hi-Vol is set up at a residential house on Kingsmill St within Ravensthorpe townsite.

- PM10:

The Hi Vol sampling for PM10 allows Galaxy to assess the potential for adverse effects on human health in the local community from exposure to fine particulate matter. Galaxy uses nationally recognized ambient air quality standards for various common air pollutants, including PM10 as a trigger level. PM10 has remained below the threshold for the 24hr standard, see **Error! Reference source not found.**



- Metals:

The Annual Concentration Trigger threshold (health values) used by Galaxy have been recommended by Environmental Technologies & Analytics (ETA). The values were derived from health guidelines published by the World Health Organisation (WHO) and the United States Environment Protection Agency (USEPA), which

differ substantially in some cases. Galaxy have used the lowest value from these guidelines as an ‘annual trigger threshold’. If results returned are above the annual trigger threshold a more detailed assessment will be completed. Trigger thresholds are derived for longer-term exposure (life- time exposure), not short-term exposure. Metals tested for by the Hi Vol sampling program include Beryllium, Cadmium, Manganese, Hexavalent Chromium (CR VI) and Lithium. A full year of sampling has been completed, allowing Galaxy to utilize the annual trigger threshold. An annual review conducted by ETA of all dust monitoring results was undertaken for the 2019 Annual Environmental Report. In this report recommendations have been made to cease monitoring for the analytes which continuously came in below the Limit of Reporting (LoR).

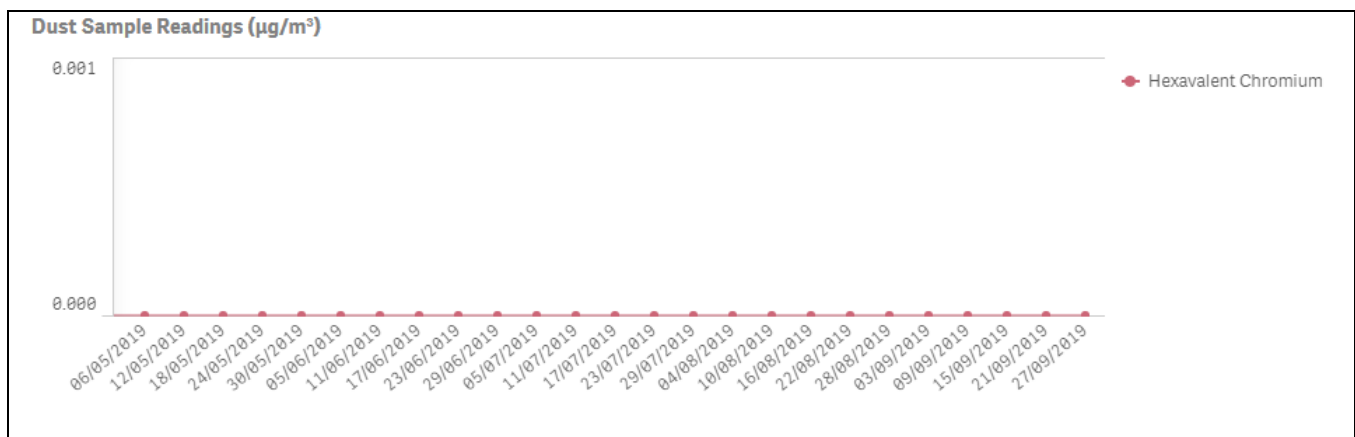


Figure 5 Hi-Vol sampling results for Chromium VI (respirable dust). Where 0 is shown results are below the labs Limit of Reporting.

Hexavalent Chromium continues to remain below the Labs detection limit.

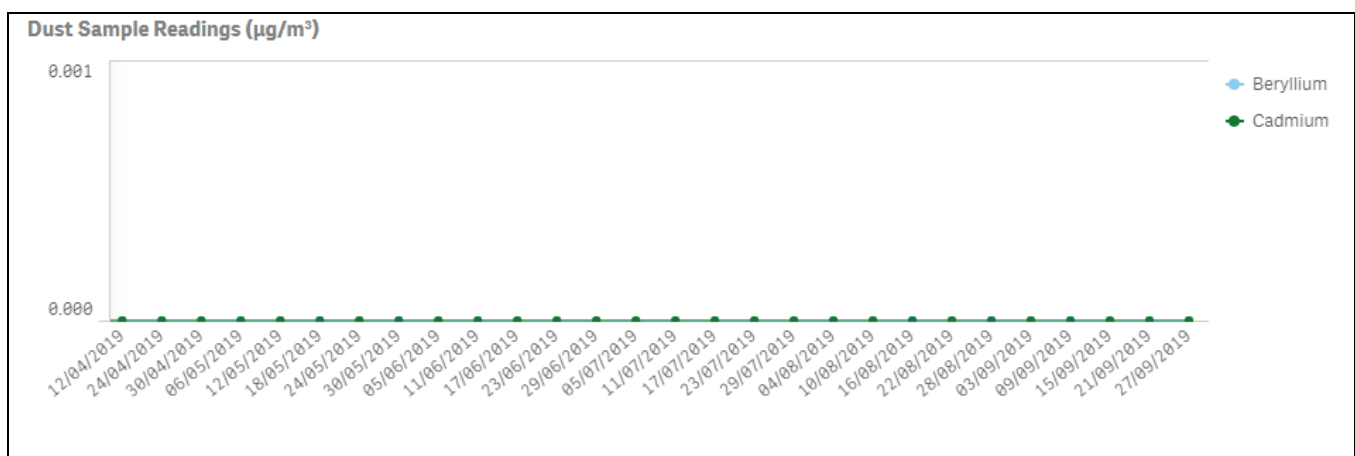
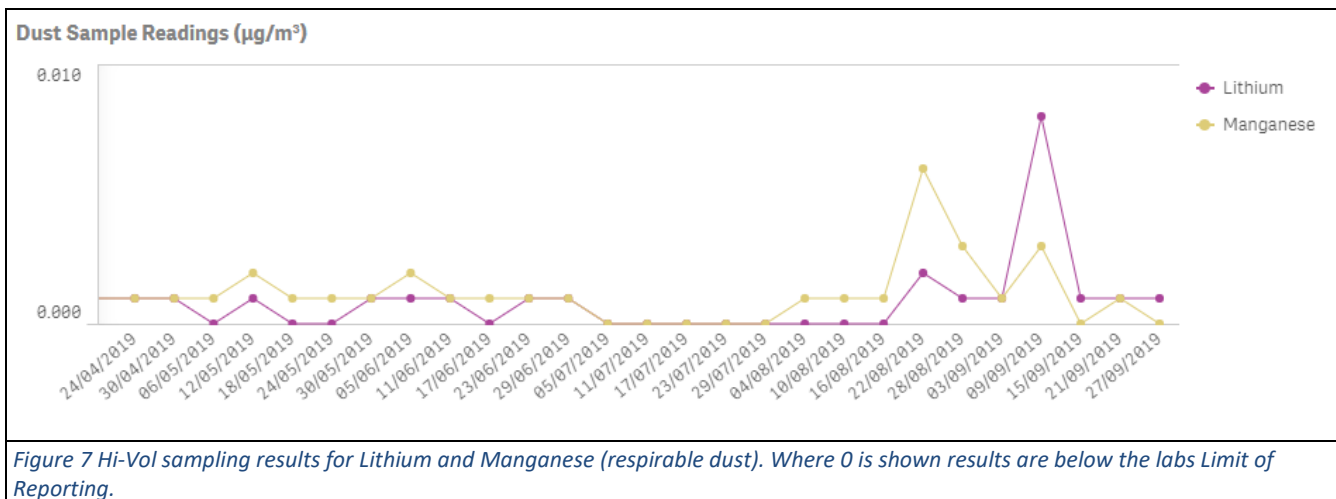


Figure 6 Hi-Vol sampling results for Beryllium and Cadmium (respirable dust). Where 0 is shown results are below the labs Limit of Reporting.

All recent monitoring results show that both Beryllium and Cadmium remained below their trigger threshold of 0.000400 µg/m² and 0.0006 µg/m², respectively.



All monitoring results show that both Lithium and Manganese remain below the trigger threshold of 0.20 µg/m² and 0.05 µg/m², respectively.

8 COMMUNITY ENGAGEMENT ACTIVITIES

- Pitch your Project will be occurring In December this year, funding is granted to those projects which project sustainability within the community. The previous years funding amounted to around \$140,000.
 - Funding was allocated to the Shire for upgrading the Ravensthorpe Gym.
- The Galaxy Day held October 25th was a huge success with 90 adults and 50 children from the community attending.
 - KN- The tour was a very informative day and well received.
 - SD- Due to the date set the local school kids were not able to attend the event, it would be good to organize a school visit for another day.
 - KM- We will be able to liaise on a date and time for a school visit at Mt Cattlin.

8.1 Community issues Raised

24-hour Operations

- KB raised the fact that 24 operation has not had adequate discussion in the previous CCG meeting and would like further information relating to the proposal and the foreseen impact of the local community. Concerns relate around noise, dust and light pollution.
 - KM- stated this will be included in the presentation at the end of the meeting and we could discuss any questions relating to 24 operation then.

Dust

- JF- How do the DDG's worked and how can the small funnel at the top indicate the amount of dust deposited in the Ravensthorpe area and be representative of the health effect to the local community. Are they made to a specified patent or specific standard? The results which indicate Galaxy are within their performance target, doesn't seem to represent the amount of dust being deposited on peoples belongings, historically there have been large volumes of dust deposited over the months/ years during Galaxy's operations.
 - KB- Being made to a set standard allows for results to be compared over multiple locations. There is also a difference to respirable and deposited dust on people's health.
 - KH- The DDG's indicate the deposition rate over the month, this rate is below what is deemed acceptable by NSW EPA (2017).
 - ID- I presented the same question about the DDG's to Galaxy earlier in the month, as the DDG's look homemade, I wanted to know if they were made to meet certain standards. Galaxy have responded that the DDG's met Australian Standards for the set up and location. There is a lot of dust around, but if Galaxy are meeting Standards can we question it further? We need a tolerance level.
 - KN- This will need to be captured in the Mt Cattlin Mine Closure Plans, to ensure dust is not an issue after mine closure.
 - PM- Galaxy have committed through the Airborne Material Management Plan (2017) to monitor deposited dust with monitors that meet Australian Standards. This document was submitted to DWER and approved. Dust gauges are established and monitored in accordance with AS/NZ standards AS/NZS 3580. The DDG stands are designed, installed and monitored to meet Australian standards. Due to Mt Cattlin's proximity to the coast, our stands are placed in a sealed, rust proof (pvc) container, with the prescribed 150 mm funnel situated 2 m (2.0 +/- 0.2 m) above ground level and sealed into the top of the sample bottle with a approved rubber stopper. Collection glassware is provided by the lab; this is the bottle that the falling dust sample is collected in via the funnel. Galaxy have placed the sample bottles in an enclosed holder as opposed to an open holder to (a) provide protection from vandalism, (b) eliminate light to the sample bottle and thus limit the growth of algae which can grow rapidly in captured incident rainfall, (c) reduces the risk of colonization by stinging insects and spiders, and (d) eliminates the need for bird roosting exclusion metal work above the unit, as birds tend to avoid the round PVC Capsules and sample contamination with bird droppings is greatly reduced. Galaxy have opted to use polypropylene (not polycarbonate) scientific plastic funnels as oppose to glass primarily on safety grounds and the

plastic funnels satisfy the functional requirement of AS 3580.10.1.2003. The glass versions break easily when rapid temp changes (i.e. hot days prior to temp drop associated with a thunderstorm). The primary reason for use of a non-glass funnel is improved safety for samplers - When handling broken funnels or removing or fitting the funnel into the stopper and then into the top cover there is a higher risk for the glass funnels to snap off potentially resulting in hand injury. There are many versions of DDG's online and you could say all look homemade, most are made to suit specific site conditions.

Rehabilitation of Waste Rock Landform

- JF- Rehabilitation of the South face of the Waste Rock Landform (WRL) needs to be completed to stop dust blowing into town, our house is badly effected by dust it gets covered in dust, it is hard to believe that the deposited dust in the DDG's are representative to what is accumulating in our local area.
 - KM- Progressive rehabilitation will occur on the south face of the WRL, we need to ensure a face has become inactive prior to commencing rehabilitation (no longer tipping waste) to prevent loss of topsoil.
 - KB- Topsoil is a limited resource and should only be applied just before seeding to prevent soil loss.
 - KM- Galaxy will put together a detailed plan for the slope rehabilitation of the WRL.
 - JF- The silver product is what concerns us the most, just keep the rehabilitation going, don't stop.
 - KM- The greatest risk for the silver product (Mica), is from the Tailings Storage Facility (TSF) and the Temporary Tailings Storage Facility (TTSF) as these contain the fine material which is easily picked up by the wind. Both facilities have been capped as of November the 20th. The dust that comes off the WRL is very limited and associated more with earth moving activities.

House Inspections

- KM- Building inspectors that came to site inspected 24 properties. Of these 20 properties were identified as being within what would be expected for;
 - a. The age of the house,
 - b. The very dry season drying the clays in the soils, and
 - c. Recent seismic activities in the area.

Four houses, the school and 3 residential properties will need to determine the probability of mining

activities influence. Notifications of the inspection outcome will be sent out soon. We have mapped the locations to identify if there are any trends.

- JF- Did the shire have any of their properties inspected
 - GS- No this was not requested, some damage has occurred to a number of property structures due to the seasonal weather. Due to the 2017 extreme wet event followed by extreme dryness over the following seasons. The properties which have this damage are all situated in a direct line as they fall on the same alignment with a similar clay sub-grade. Shire owned properties that fall outside this area do not appear affected.
- JF- We recently had a valuation of our property carried out and it was \$100,000 less than it was valued at 5 years ago, the main reason was its proximity to the mine site and the view of the waste dump.
- KB- Keith is there different levels of engagement or work to mitigate impacts caused to the different areas, dependent on the overall impact the mine has? Houses closer to the mine site will have greater impact than those further away.
 - KM- Galaxy will not be washing down people's properties. Different levels of stakeholder engagement will occur dependant on the community members proximity to the mine.

Floater Road Diversion

- KM- Stage two of Floater Road is progressing and Galaxy are committed to seeing the project completed. Approval was granted from Main Roads just weeks prior to harvest, it was decided to delay the commencement of the road diversion to reduce the impact during the harvesting season.
 - GS- I did not realise the original Floater Road would be reinstated until recently. Reinstating the road back on its original route is the shortest route to the grain bins. What needs to be asked, how will the completed Stage 2 Road Diversion serve the community once the reinstatement of original Floater Road occurs? Also to consider, how feasible is it to spend money to bitumen seal stage 2 if it will only be used for 4 years, or will this become the heavy haulage route?
 - KN- As for value for money it possible is not realistic, we would be able to put the money towards other projects that are better suited to the broader community.
 - GS- There are possibilities to look at, these possibilities will need to be scoped out if we do not go ahead with the completion of Stage Two. One option is, money could be used now to make stage one better equipped to meet requirement of its users and the remainder of the money could be put aside for the reinstatement of the original aligned Floater Road or other road options.

The road diversion work for both Main Roads and SoR will be overseen by a single engineer

consultant and carried out under one contract for ease of management.

- Perhaps we could remove the sealed portion of Stage Two Road Diversion and use the funds elsewhere? It is more economical to maintain a gravel road as appose to a bitumen road.
 - SL- A good road is what is required, weather not its sealed.
 - SL- Is there an ability to ensure the road verges are maintained, with the slashing of weeds, the weeds are very noticeable for the tour busses taking tourist to see the ranges and flowers?
- KM- The funding for the completion of stage two road has been put aside and will be available for any project the community agrees would benefit the community the best, if this continues to be the sealing of Stage two of Floater Road Diversion then this is where the funds will go if it is other projects the money will go into the approved project.

9 OTHER BUSINESS

DMIRS /CCG Meeting

- KN- Informed the members of the CCG that Laura Copeland (LC) had contacted him to organise a meeting between the CCG and DMIRS. Further correspondence between Laura Copeland and KN has seen a meeting set for the 25th November between CCG and DMIRS.
 - KB- A meeting with DMIRS is a good idea.
 - JF- Believes that the community has much to discuss as the community is very unsettled.

Galaxy members of the CCG would not be attending this meeting as no notification was received from DMIRS that this meeting was to take place.

Review of Terms of Reference

A review of the CCG objectives occurred to determine if they were being met, the below points outline the findings of this discussion;

- KM-Galaxy have not come across as open and transparent in its communications, this is partly due to the nature of how we share our information and in the way data is provided.
- KH- We need to determine what Galaxy need to do to assist with the dispersal of information to the local community and not rely as heavily on the CCG members to do this. We also need to ensure we are getting the correct information out to community members.

KN- The meeting would be best held Bi-monthly, unless there is something which requires to have a meeting

called earlier, 1/4ly meetings are to long in-between.

GS- I meet with the CEO daily so when he is unable to attend a CCG meeting, I will discuss the main issues raised in the next available meeting I have with the CEO.

10 NEXT MEETING

Meetings are scheduled to occur the second Thursday of the month at 8am.

- The next scheduled meeting will be held on the 30th January 2020.

11 CLOSE

- Meeting closed @ 09:30 AM, 14/11/2019

Attachments: None