



Office of the Independent Planning Commission NSW
Level 15, 135 King Street
Sydney NSW 2001

MCPHILLAMYS GOLD PROJECT (SSD-9505) PUBLIC HEARING WRITTEN SUBMISSION

1. Introduction

I, Warwick Giblin, table this submission following on from my verbal presentation to the IPC Hearing held on 8th February 2023.

I represent the Belubula Headwaters Protection Group, in particular the Kings Plains community, and address the amenity and social impacts and associated costs expected to be borne by the local residents. In all of 2021 I acted for some of the landholders who live in Walkom Road at Kings Plains, mainly in relation to attempting to negotiate a deal with the Developer.

2. Bona Fides

I have had more than forty years executive level experience in Government and corporations in environmental impact assessment. I first prepared EIS's for coal mining in the Hunter Valley back in the 1980's.

Over the past 13 years I have assisted rural landholders and rural Councils in assessing mining and energy projects and negotiating fair and just outcomes for my clients.

Since 2011 I have assessed more than ten mine proposals, including four gold mines (Tomingley, Dargues Reef, Cowal Underground and Cowal Open Cut Expansion). Local Government was my client in all four cases.

I am an Adjunct Professor, Faculty of Science, Agriculture, Business & Law, University of New England, appointed in recognition of my environmental and social advocacy for rural society. In 1989 I was appointed the Founding President of EIANZ, the association for professional environmental practitioners. Am now a Fellow of the organisation.

3. Key Messages

3.1: Summary:

The McPhillamys mine proposal should NOT be approved because, inter alia, there are, simply **too many homes too close** to the mine site. The reasons for this judgement are:

1. the incompatibility of the proposed mine with the existing land uses;
2. serious question marks relating to the noise modelling – see enclosed;

3. the magnitude of the adverse amenity impacts (due to noise, dust and visuals);
4. the magnitude of the adverse social impacts of the mine on locals;
5. that the adverse environmental, social and economic costs outweigh the predicted benefits;
and
6. the project is not in the public interest, for the above reasons.

As the IPC considers its decision, I respectfully encourage you to please spare a thought for the Kings Plains residents who have had the mine proposal thrust upon them, upturning their lives over the past few years.

3.2: Clay Preshaw (DPE) Q&A

I regularly engage with DPE executives and I offer a few comments below in relation to Mr Preshaw's concluding remarks at the Hearing.

- Mr Preshaw stated that the DPE now has a full suite of technical tools/guidelines/policies to quantitatively assess all environmental elements – noise, dust, water, etc. A key issue is that many of the tools/guidelines/policies actually favour the developer, to the detriment of the rural landholder. One example is the Noise Policy for Industry – the background noise level is assumed at 30dB, when in reality is often much lower in rural areas. Another is the Voluntary Land Acquisition and Mitigation Policy (VLAMP) – it is biased in favour of the miner. Also, landholders have little technical capacity to understand VLAMP and negotiate a fair deal. The DPE will not assist landholders in such matters.
So whilst the DPE touts that it has technical guidelines, they are not fair and equitable. Also, noise, dust and water matters are highly technical and the DPE has a habit of assuming what the developer says is accurate, rather than engaging independent specialists to interrogate the veracity of the data and modelling assumptions.
- Further on the matter of environmental elements being assessed in accordance with the technical guidelines, the IPC should be aware that the DPE does not re-run the project's noise modelling, nor is there independent rigour in examining the input data and the assumptions. Thus, you have opaqueness, with the DPE quietly accepting the finished product. How can this be fairly called a 'quantitative assessment'?
- In my experience, I question Mr Preshaw's assertion that the DPE has a "very open-door policy" when it came to DPE officers meaningfully engaging with Kings Plains residents. The residents were basically 'hung out to dry' by the DPE. At no point did the locals feel that someone/anyone was listening to them, not even the Government's lead planning agency.
- Mr Preshaw said assessment of social and economic issues was a 'tricky' issue and a lot more subjective. I agree. The DPE only used social impact assessment specialist experts because I lobbied for same for the Kings Plains community. Initially on this project the 'stock standard' impact assessment officers undertook the SIA evaluation. And was inadequate. Am happy to discuss more.

4. Similarities between McPhillamys Mine Proposal and the Rocky Hill Mine Proposal

I cordially invite the IPC to compare the McPhillamys proposal with the Rocky Hill coal mine proposal at Gloucester which was refused by the then PAC and later re-affirmed by the Land & Environment Court (LEC) in February 2019.

There are some **stunning similarities** between the two mining proposals.

Preston CJ of the LEC determined that the Rocky Hill Mine should be refused due primarily to its “significant and unacceptable planning, visual and social impacts”, which could not be satisfactorily mitigated. To be clear, this was the principal but not the only reason for refusal (GHG emissions was the other reason).

I elaborate on the comparison between the two:

1. At Rocky Hill there were 111 houses within 3 kms of the project site. At McPhillamys there are about 104 (88 within 2 kms of ML boundary + estimated 16 between 2 and 3 kms from ML boundary; 11 to the north, 4 to the SW, 1 to the E). So, house numbers are comparable;
2. At Rocky Hill there were 9 homes with a direct view of the mine. At McPhillamys there are approx. 20. So, double the number of homes in direct view here compared with Rocky Hill;
3. At Rocky Hill, no operations were proposed overnight. Here operations are planned 24/7 day and night; and
4. At both Rocky Hill and McPhillamys noise and air quality technical compliance criteria were/are predicted to be met, albeit likely at the margins of compliance.

If one reflects on the key metrics of the two mines it is not unreasonable to conclude that a merit-based assessment would similarly find that McPhillamys should also be refused.

Simply put there are **too many homes too close to the mine site, with unacceptable amenity and social impacts**.

5. Comments On Amenity Impacts

5.1 Noise and Dust

The independent RCA Peer Review (to be forwarded by the Belubula Headwaters Protection Group) notes that the **proposed consent conditions in B7 Table 1 (operational noise criteria) will not protect the amenity of the nearby receivers because the limit stipulated in B7 will only apply 2% of the time. The reason being, the breeze/wind will be more than 0.5m/sec for 98% of the time.**

In such circumstances NPI permits a project noise allowance of another 5dB, taking the overall noise concession to 40dB. This is some **16dB above current background** at some homes.

RCA queries whether the McPhillamys assessment is accurate. Even if the Developer’s modelling it is to be believed and the project is deemed technically and theoretically compliant, in my experience of the performance of other mines, the closeness of homes and critically their location **downslope**, means it is likely the mine would operate at best at the margins of noise and dust compliance. Exceedances would impact a substantial number of homes and people. Just as was the case at Rocky Hill.

I also refer you to the Tomingley Gold Project where noise and dust actual levels exceeded the EIS modelling resulting in every house in the village requiring the fitting of mitigation measures. Every house had to be fitted with double glazing, air conditioning and water filtration measures because the mine failed to meet the predicted noise and dust emissions. There is a high chance the same environmental result could occur at McPhillamys, for the reasons outlined herein.

Again, I remind the IPC of the similar Rocky Hill scenario, where the project was refused approval on noise, dust and amenity grounds.

Noise Assessment Technical Review

Mr Alex Rees, Acoustics Manager with RCA Australia Pty Ltd has conducted an independent peer review of the Amended Noise Impact Assessment report prepared by Muller Acoustic Consulting Pty Ltd ('Muller') for the project's EIS and Amended Project Design.

Mr Rees has been a member of the Australian Acoustical Society for over six years and has been an acoustic consultant for over 10 years. Alex has also been a sessional lecturer at the University of Newcastle since 2019 where he provides a lecture on Noise Impact Assessment.

The independent RCA Peer Review identifies errors in the noise modelling calculations, the consequences of which benefit the Miner. See below for details. The full RCA report will be tabled by the Belubula Headwaters Protection Group.

Background Noise and Project Noise Trigger Levels

The RCA Peer Review finds the Noise Policy for Industry (NPI) procedure for setting background noise levels, particularly the rules for excluding data, has not been followed for the McPhillamys assessment.

This may well have bearing on the adopted criteria and the associated degree of impacts. RCA tables evidence that:

- Table 10 of the Amended Noise and Vibration Impact Assessment (ANVIA) presents the Assessment Background Levels [ABLs - background level for each assessment period (day, evening and night)]. ABLs are measured within the Kings Plains precinct over 87 days. There is a very large range in the ABL day values. The maximum daytime ABL was 44 dB, and the minimum was 14 dB (14 dB was measured on both the 4th and 5th of January), giving a range of 30 dB.

This range is too large to be correct. When RCA reviewed the noise monitoring charts in Appendix B it was noted that several days (including the 4th and 5th of January) had large segments of data missing (the noise terminal appears to have been off-line). The process to calculate the ABL for these days appears to have been corrupted by large sections of missing data.

The NPI rules require exclusion of day, evening and night periods if a minimum number of samples was not present, meaning no value should have been presented for these days.

- Also, much of this data was taken during school holidays. The NPI states that background noise monitoring should not be undertaken during school holidays.
- The Muller report does not state that periods of wind above 5 m/s has been excluded prior to analysis and the monitoring charts do not show periods of exclusions. This indicates that periods of rain or wind above 5 m/s may not have been excluded prior to analysis. This situation requires review.

- The range of presented ABLs for the evening is 21 dB (maximum of 45 dB and minimum of 24 dB). This large range seems implausible unless the ABLs have been affected by either extraneous noise, atypical conditions (ie school holidays) or periods of wind greater than 5 m/s.
- RCA recommends that the ABLs and then the RBLs (Rating Background Level (RBL - the median of ABL values over the whole monitoring period) as defined for Kings Plains be re-examined in accordance with NPI's procedure for calculating RBLs, including all exclusion rules.
- The potential outcome of such a review is that the day and evening RBLs may need adjusting downwards (resulting in an adjustment of possibly 1 dB during the day and 2 dB during the evening to meet the minimum background levels). In noise terms, even a small adjustment such as this would have a bearing on both operational and construction noise criteria and how the VLAMP assessment and consent conditions would be framed.

A downwards adjustment will also give further context to whether the current DPIE proposed noise conditions are reasonable.

Critical Assumptions Underpinning the Noise Predictions

The Amended Noise and Vibration Impact Assessment (ANVIA) states that construction and operational noise predictions are lower than what was presented in the original EIS, largely due to the selection of quieter equipment for modelling purposes.

RCA's Peer Review notes that the ANVIA also states that the **fleet has not been finalised**.

RCA emphasises the importance that **any consent must be based on the construction vehicular fleet to be used meeting the modelled sound power data presented in the ANVIA**.

The operational noise results presented in Table 37 of the ANVIA may change pending a review of the Kings Plains noise criteria (once the RBL analysis is reviewed) and also once the stability class frequencies are confirmed.

Section 6.8 of the ANVIA states that "Mobile equipment such as haul trucks, excavators and drills are to be mitigated to achieve low noise emissions. Therefore, factors such as intermittent noise and duration have not been considered further in this ANVIA." RCA's Peer Review **emphasises how important the sound power data and spectrum of the mining fleet is and contends that the question of intermittency should not be immediately dismissed**.

The NPI lists intermittency as an annoying characteristic, which when present, attracts a 5 dB penalty. The penalty applies at night-time only, "where the level suddenly drops/increases several times during the assessment period. With a noticeable change in source noise levels of at least 5 dB(A)".

It is difficult to tell from the noise contour figures provided in the ANVIA which do not show noise source locations, but one scenario where intermittency could be applicable is where mobile plant cycle through periods of varying exposure to a receiver. This scenario will occur as the operations, eg pit shape, change. **This data should be re-examined**.

A scenario that appears not to have been captured is the use of the site access road at night-time. Any noise from vehicles on the site access road should be added to general “site noise” and assessed against the NPI. The site access road itself may add an “intermittent” nature to noise levels received by the receiver closest to the site access road.

Muller has concluded that tonality and low frequency noise will not be an issue based on the modelled fleet. RCA reiterates that if the final fleet differs from what was modelled, this assumption may prove false.

Plant Selection

The total sound power from the amended mine site has been reduced compared to the initial Noise and Vibration Impact Assessment (NVIA), largely due to the use of data for quieter plant and equipment. The Amended NVIA notes “it is highly likely that alternate (electric drive) haul trucks will be used for the Amended Project (or similar fleet with equivalent sound power levels and spectral content)”. “Highly likely” has too much wriggle room attached to it. The equipment fleet must be declared and locked in to all relevant consent conditions.

The assumed sound power and spectral content of the plant is the primary input into the noise model. If these assumptions prove false, then the model outputs are not representative of what will occur in reality. This could have bearing not only on the absolute noise levels but also potentially on low frequency noise.

RCA’s Peer Review recommends that any project approval be conditioned on the final fleet meeting the sound power level and spectral content which formed the basis of the assessment.

After-Purchase Noise Attenuation

It is not uncommon for engine bay noise attenuation equipment fitted to haul trucks to be removed by on-site maintenance crews because it makes servicing the plant more difficult. Thus, even if the proponent intends to commit to achieving the sound powers that are presented in the ANVIA, this is very difficult to police and enforce in practice.

As an absolute minimum safeguard against the above problem, RCA recommends that any project approval include a condition that the site undertake annual fleet noise testing to track any deterioration of sound performance. The conditions should also include a requirement that new equipment is sound power tested to the full relevant standards, at the time of commissioning.

Road Noise Assessment

RCA’s Peer Review notes the Road Noise Assessment has not assessed maximum noise levels associated with **braking and engine noise at the proposed intersection of the mine site access and the Highway**. The proposed intersection could potentially cause significant sleep disturbance impacts for the nearest resident.

The assessment concludes that the overall day and night road noise limits set out in the Road Noise Policy will be achieved, however, **the assessment does not consider the additional noise that will be caused by braking and engine noise at the proposed intersection connecting the Mid-Western Highway with the site access road.**

Appendix C7 of the Road Noise Policy states “Engine brake noise from heavy vehicles is a major source of community noise, and impacts can occur during both the day and night. It can be a source

of sleep disturbance in both rural and metropolitan areas. Likely locations for noise impacts from engine braking include traffic intersections...”

The relevance of this, is that the Amended Noise and Vibration Impact Assessment presents traffic numbers for the first three years (construction phase) which indicate that the mine **will add over 100 light vehicles and approximately 70 heavy vehicles to the general traffic each night.**

Creating a substantial intersection where there is currently free flowing traffic will certainly create additional engine and braking noise which may potentially lead to significant sleep disturbance impacts for the nearest receiver. RCA recommends that this be re-assessed.

VLAMP Assessment

The RCA Peer Review notes the outcome of the VLAMP assessment is based on the current project noise trigger levels (which may change for Kings Plains following its recommended review of the RBLs) and re-assessment of whether or not noise enhancing weather is a feature of the area. **RCA recommends temperature inversion aspects be verified against a second, nearby weather station,** for example Orange Airport.

The VLAMP assessment will need review once the above points are confirmed.

DPE's Proposed Noise Conditions

RCA expresses concern that accepting the modelled levels as the limit of what is reasonable and feasible will not protect the amenity of the nearby community for the following reasons:

A) The proposed noise conditions are higher than the Project Noise Trigger levels (PNTLs) derived under the Noise Policy for Industry (NPI). The NPI already acknowledges that “not all members of the community will find the noise acceptable” even when the PNTLs are adopted.

B) The above concern is compounded in a rural environment where the background levels are very low. Table 12 of the ANVIA shows that the night-time RBLs (background noise) are 24 dB (Distant Rural), 30 dB (Kings Plains), 24 dB (Walkom Road) and 26 dB (Sturgeon Hill).

RCA refers to NSW Caselaw Gloucester Resources Limited v Minister for Planning where it was accepted that the impact of an intrusive noise is “highly dependent on the environment in which it is experienced”.

This means that the PNTLs are already potentially insufficient to protect the amenity of the community due to the true background levels (particularly at night-time) being lower than the adopted levels. If the project approval noise conditions are then higher again, this only further degrades the amenity of the community.

C) If Table 10 of the ANVIA is to be believed, the lowest night-time ABL that was measured in Kings Plains was as low as 14 dB. The DPIE are proposing a night-time noise condition for these receivers of LAeq,15 minute 37 dBA (Table 1 of proposed consent conditions).

But these proposed conditions are only valid during calm conditions. The ANVIA has reported that calm conditions rarely occur, so in fact, the proposed DPIE noise conditions for Kings Plains at night-time will routinely be LAeq, 15 minute **42 dBA (condition B9). This is 28 dB higher than the lowest reported night-time ABL for Kings Plains.**

The next lowest night time ABL reported for Kings Plains was 18 dB and 20 dB. **The DPIE proposed night-time noise conditions for Kings Plains according to condition B9 would still be 24 dB and 22 dB higher than these reported ABLs respectively.**

Condition B8 Table 2 of the proposed DPIE conditions outlines the meteorological conditions for which the proposed criteria are valid. These meteorological conditions are based on what was modelled in the Amended Noise and Vibration Impact Assessment (ANVIA). Clause B9 states that “for other meteorological conditions, the applicable noise criteria are as defined as Table 1 plus 5 dB”. The concern here is that the ANVIA presented weather analysis that shows that the applicable meteorological conditions very rarely occur. **This means that the criteria presented in Table 1 will very rarely be applied, and that the applicable noise criteria will routinely be 5 dB higher than what is shown in Table 1.**

In summary, the PNTLs presented in the ANVIA are most likely to be insufficient to protect the amenity of the community due to the true background levels being lower than the adopted background levels, but the **DPIE are proposing noise conditions that will routinely be a further 5 dB higher than the PNTLs presented in the ANVIA. This must be seen as an unacceptable degradation to the amenity of nearby receivers.**

RCA’s Peer Review recommends the following reviews are conducted prior to the contemplation of any project approval:

- The RBLs for Kings Plains be re-calculated, in accordance with the NPI procedures, including exclusion rules.
- Once the RBLs are confirmed, any new operational and construction noise limits be applied to receivers. All results and discussion of impacts, including the VLAMP assessment, will need review to ensure they are consistent with the confirmed RBLs.
- A maximum noise level assessment is undertaken for the proposed site access intersection, given the number of light and heavy vehicles the project will generate at night-time.
- Temperature inversion frequencies be cross-checked against a second nearby weather station (eg Orange Airport).
- If project approval is granted, any and all mitigation strategies outlined in the ANVIA, including sound power levels and spectral content of mining fleet, become conditions of consent. RCA also recommends the site undertake annual fleet noise testing to track and action the sound degradation of fleet.
- If project approval is to be granted, RCA recommends that the consent noise criteria reflect the Project Noise Trigger Levels outlined in Table 17 of the ANVIA (once these are confirmed) and that those limits are valid for wind speeds up to 3 m/s, not 0.5 m/s. The wind analysis presented in the ANVIA shows that calm conditions rarely occur. That would mean that proposed noise limits which are only valid for wind speeds up to 0.5 m/s will rarely apply and thus the additional noise concession of 5dB will mean a limit of 40dB.

5.2 Visuals

The scenic rural landscape to the west of and overlooking the Kings Plains hamlet would be changed to an industrialised state by the mine. It will create a significant impact on Kings Plains residents due

to site's immediate proximity and a direct line of sight. The mine will literally overshadow the Kings Plains community from the valley floor and rising up 150m.

The overburden stockpiles at the edge of the mine site at Kings Plains will present a high visual impact. As acknowledged by the DPE, the high visual impacts will adversely affect the quality of life and the amenity of those who live in Kings Plains for **at least the first 6 years (half the mine life)**.

A reminder, there are more homes at Kings Plains with direct views of the mine than at Rocky Hill.

5.3 Light Pollution

Currently Kings Plains residents have uninterrupted views of evening skies set in a tranquil rural landscape, lit only by the moon and stars. Dusk to dawn night lighting sources on the mine will be significantly visually intrusive and overlook the valley and people living below.

5.4 Blast Fumes

Little mention has been made in the assessment about unplanned blast fume emissions. These are likely on occasion and given the number of people living close by, the consequences would be significant. For example, at Maules Creek Mine, Narrabri, two people two kms away required hospital medical attention after being caught in a chemical cloud drifting from a mine blast.

5.5 Amenity - Conclusion

In regard to amenity impacts, I recommend the IPC follow its Rocky Hill decision where it determined that ***“even though the project is predicted to be technically compliant re noise and dust performance, the project would create significant impacts on visual amenity and create noise and air quality impacts above what is currently experienced by people within the current land uses. The PAC finds the project is therefore incompatible with these land uses.”***

6. Social Impacts

Social impacts will be widespread and significant. And unacceptably so.

It is revealing that the DPE Assessment Report states:

para 189: “Kings Plains residents are likely to be impacted by loss of community wellbeing, amenity impacts, loss of rural way of life and sense of place, impacts on health and question marks around uncertainty and trust and decision-making systems”.

Kings Plains locals are likely to experience heightened mental health risks of anxiety, depression and loss of place arising from having their peaceful rural landscape upturned by a major industrial facility moving in.

Sleep disturbance from night-time noise, dust impacts on household activities and outdoor living, changed vista, etc will be key concerns.

I now wish to mention the unlevelness of the playing field for Kings Plains residents and how they have been denied natural justice.

There has been a power imbalance that has limited the ability of the locals to negotiate fair terms. Compared with the Developer, they are disadvantaged because they do not have the time, technical knowledge, financial capacity or political clout that the developer benefits from.

Whilst some deals between landholders and the Developer have been signed, I encourage the IPC to examine the fairness of said agreements.

The fine print says any buyout would not be until the Financial Investment Decision (FID).

Who knows if and when that might be? The Sunrise Mine (Trundle) was approved 20 years ago and still there is no FID. Vickery Mine (Gunnedah) was approved in Aug 2020 yet FID is awaited.

About 50% of the occupants of the 40 homes at Kings Plains are more than 60 years of age.

What if advanced aged landholders need to sell to fund their aged care costs?

Who would buy and at what price?

And for all locals, what if changed life circumstances mean they need to promptly sell.

Who would buy and at what price?

There are locals with respiratory and other health challenges.

What if they wish to sell?

Who will give them fair sale value? To aggravate the situation, being exposed to increases in dust will exacerbate their health conditions.

In my experience the Developer utilised its power advantage to deprive landholders of a fair and just outcome. This attitude has caused great distress to many. Furthermore, it is a gross denial of natural justice for locals, many of whom have lived here for decades.

It would be a reprehensible outcome for them to be left burdened by amenity and social costs whilst the developer reaps the benefits and makes profits for its shareholders.

7. Conclusion

During the IPC Hearing you heard sobering stories from many local people. People whose lives have been upturned by the mine proposal. **Please hear and act on their voices.**

The draft consent conditions are predicated on the assumption that the mine would deliver according to all the modelling. As a result, the consent conditions contain insufficient safeguards and checks and balances to protect the wellbeing of locals in the event that things turn for the worse. Why should such costs be outsourced to locals whilst the miner reaps the benefits?

In conclusion Commissioners, I respectfully invite you to reflect on the Rocky Hill comparison and, as a result:

1. Give priority recognition to the likely lived unpleasant and disruptive experiences of those people living in the 100+ homes within 3kms of the proposed mine site;
2. Accept the evidence that, given the location of the Kings Plains hamlet is at the foot of the hill where the mine is proposed and which overlooks the village, Kings Plains residents are most vulnerable to on-going unacceptable noise, dust and visual impacts, which, in all probability, will at best be border-line technically compliant. The precautionary principle should thus be triggered; and
3. Refuse the mine proposal.

If you have any queries, please don't hesitate to contact the undersigned on [REDACTED]

Yours sincerely



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