12 February 2026

Ms Brittany Golding
Department of Planning, Housing and Infrastructure
Locked Bag 5022
Parramatta NSW 2124

Via planning portal submission

Dear Ms Golding,

Hillgrove Mine – Mod 5 Extension of Mine Life - Submission

I refer to the Hillgrove Mine site Mod 5 - Extension of Mine Life (DA98/35-Mod-5) currently on exhibition on the NSW Planning Portal for SSD modification.

The application being made under section 4.55(2) of the Environmental Planning and Assessment Act 1979 includes an extension of mine life to 31 December 2030, an increased processing rate, additional tailings storage capacity, and modifications and additions to ancillary mine infrastructure.

This letter is a submission against approval of this modification based on the following summarised factors:

- The Human Health Risk Assessment has not been performed adequately and contains misinformation. This risk assessment clearly identifies contaminated land issues which haven't been addressed as requiring further assessment in any part of the overall assessment completed for this modification.
- The planning pathway is incorrect and doesn't meet the provisions specified under 4.55(2) of the Environmental Planning and Assessment Act 1979.

These matters are addressed in detail below.

PLANNING ISSUES

Under section 4.55(2) of the Environmental Planning and Assessment Act 1979 the first point, 4.55 (2(a)) states:

"*A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if— it is satisfied that the development to which the consent as modified relates* ***is the same or substantially the same development as the development for which consent was originally granted*** *and before that consent as originally granted was modified (if at all).*"

The specific scope of works for this modification includes:

- Increasing the processing rate from 250,000 tpa to 500,000 tpa – doubling the production capacity, this is a significant change from the original approval. Any other industry that proposed to increase their production capacity this much would be required to go through an EIS process and perform stringent assessments.
- Modification to processing and tailings infrastructure, including change in processing methodology to produce dewatered tailings, including construction and operation of tailings

dewatering filter plant – this is a change in process to what was originally approved and should require comprehensive assessment.

- The initial excavation of the Garibaldi Open Pit will yield approximately 1,800 kt of waste rock material to support construction – this is 1,800,000 tonnes of waste rock.
- Blasting activities will be required up to three times per week – this is significantly more than what occurs under existing approvals.
- The extent of the Garibaldi Open Pit will be 4 ha and 60 m depth – this is an additional 2,400,000 m^3 of disturbance.
- Construction of a new 1.3 km haul road to Brackins Spur site across rugged terrain which would require extensive design.
- Construction of a new DTL which is over 20 ha in size – a development this extensive needs comprehensive assessment.
- 375% increase in heavy vehicle traffic (refer to Table 3.6 of the Modification Report – total heavy vehicle traffic movements per day is 38 from the original approved 8).
- Change from pumping of conventional wet tailings and placement at TSF2 to hauling of dewatered tailings and placement at TSF2 and the DTL. The infrastructure required for this haulage as well as the noise and dust generation.
- Change from "surface trucking of ore on day shift basis only and only under favourable conditions" to ore haulage being 24 hours per day 7 days per week.
- 36% increase in staff requirements for site operations.
- New water transfer pipeline between Brackins Spur mining area and Hillgrove infrastructure area.
- New infrastructure for processing including replacement of an existing crushed ore bin to increase the capacity, installation of high intensity grinding mills, installation of reagent bulk copper sulphate plant.

The modification report states: "*MOD 5 has been designed to maximise the recovery of the mineral resource using the mine's existing infrastructure, whilst minimising the impacts on the community and the environment.*" However, the majority of the proposal involves new infrastructure, services installation (powerlines, water pipelines) and removal of 36 ha of agricultural land, not to mention the 33.3 ha of proposed removal of local PCTs, of which 27.61 are Threatened Ecological Communities. Figure 3.1 (page 20) of the Modification Report clearly shows the extensive development area to be covered under this proposal versus what has been originally approved. The statement made by the planning consultants is completely inaccurate representation of the proposed works and this application does not meet the provisions of 4.55(2) of the Environmental Planning and Assessment Act 1979.

These works should be classified as requiring an EIS, these are not 'modifications' of existing works that are 'substantially the same development'. The provision of development approval modifications is established to allow development to make relatively minor changes to their development approvals without have to go through the lengthy process of full development approval. The Department of Planning and Councils consideration of this modification application as meeting the criteria of 'substantially the same development' is a mockery to this process and sets precedent for other developments to follow this process for substantial changes without performing comprehensive

assessments. The two government authorities need to consider whether they would allow a small quarry operating up to 30,000 t/a to double production and just consider this a modification to their existing approval without performing the appropriate assessments involved in gaining the full development approval to perform this activity.

HUMAN HEALTH RISK ASSESSMENT

The Human Health Risk Assessment (HHRA) by EnRisks dated 28 October 2025 states in section 1.4 that the "HHRA specifically addresses impacts of the proposed Project on community health and address potential impacts of changes to air quality, noise, and water quality (rainwater tanks, surface water and groundwater)." However, the assessment doesn't achieve this on all fronts. The limitation of data analysis performed for this assessment relies on very rudimentary data collected by a third party (non certified) environmental consultancy in May 2025, as well as some tank water data collected between 1999 and 2003 (over 23 years ago!) – how is this data even relevant to this current assessment?

As part of the HHRA EnRisks outline that potential impacts on human health were assessed in accordance National Environmental Protection Measure – Assessment of Site Contamination, this hasn't been completed as part of this assessment with only very preliminary assessment of potential contamination risks and then failure to advise that the further investigation is required.

There are various errors throughout the interpretation of the results from the sampling regime completed.

The following list as points of concern from the assessment completed by EnRisks and EnviroScience solutions:

1. The HHRA doesn't include any assessment around potential future soils impacts from the proposed mine expansion operations. A brief discussion around 'existing' soils is presented in section 4.2 of the HHRA with all discussion around soils and contaminated referred to in the EnviroScience Solutions report (which is not completed by a certified contaminated specialist). The EnviroScience Solutions report is summary of field data and lab data with no discussion around actual contamination assessment. The lab findings indicate contamination present (as discussed in points below) and EnRisks conclude in section 4.2.1 of the HHRA that "*All metals concentrations reported in the EnviroScience (2025) investigation were detected below the adopted health-based guidelines*" – which is completely inaccurate.

   Further incorrect assessment is detailed in the Conclusion of the HHRA which states "surface soil and surface water: concentrations were reported below the health-based guidelines developed specifically for resident exposure in Hillgrove that considered site specific bioaccessibility of arsenic and antimony".

2. The NEPM guideline utilised for assessment against was for recreational and not Residential A, regardless of whether the samples were collected in the 'road reserve' they were adjacent to residential properties that should be assessed under the Residential A HIL. This presents a serious concern to the Hillgrove residents as the Health Based Investigation Levels stipulated for soil contaminants in Table 1A(1) of NEPM are significantly higher for recreational use areas compared to Residential A. As shown in the soil sample results Appendix B of the EnviroScience (May 2025) report, Arsenic levels under NEPM Res A (limit of 100 mg/kg) is exceeded in 5 road verge locations, with sample point S14 being 1,100% higher than the 100 mg/kg investigation level; as well as three private property (SV3 – Property 16, SV6 – Property 7, and SV8 – Property 8). Even applying the site specific arsenic limit of 400 mg/kg (as calculated EnRisks) the sample site S14 is in proximity to at least 4 residential receptors

that are not associated with the mine operation and likely have extensively contaminated soil with extremely elevated arsenic levels.

The values of Antinomy presented in the results obtained; the soil sampling sites range from 10 mg/kg at S10 to 5,600 mg/kg at S14.

There are numerous journal papers that outline acceptable levels of Antinomy being around 36 mg/kg in soil, and concentrations above 150 mg/kg causing significant damage to plants.

3. The Australian Drinking Water Guideline values for Antinomy (Sb) is 0.003 mg/L (refer to: https://guidelines.nhmrc.gov.au/australian-drinking-water-guidelines/part-5/physical-chemical-characteristics/antimony). The Australian Drinking water guidelines for Arsenic is 0.001 mg/L (refer to: https://guidelines.nhmrc.gov.au/australian-drinking-water-guidelines/part-5/physical-chemical-characteristics/arsenic). There are two property rain water tanks (T22 – Property 22, and T23 (Property 23) which are close to the Antinomy guideline level. There are six surface water locations that are utilised for livestock use and irrigation / plant watering. These properties concurrently have elevated arsenic levels above ADWG's as well. SW10 is 266% higher than the ADWG for antinomy and 419% higher than the ADWG for arsenic.

4. The tank water data collected from approximately 20 properties between 1999 and 2003 was not included in the HHRA documentation and no apparent comparison between this historical data and 2025 sampling regime appears to have been performed. How can EnRisks conclude that there aren't potential future risks to local drinking water supplies and surface water storages if no assessment has been performed on these aspects?

5. The lab results indicate that Arsenic is elevated in the same locations where Antinomy is elevated; however, there is no discussion around this occurrence. The lab results also indicate a clear increase in elevated Arsenic and Antimony levels on approach to the boundary of the mine site (i.e. sample locations S12, S13, and S14 are all significantly higher than other sample areas).

6. Air quality monitoring between November 2022 and November 2024 (as outlined in section 5.4 of the HHRA) identified that Antimony concentrations in deposited dust exceeded the ASC NEPM HIL-A for residential land use at all monitoring sites with concentrations up to 1,060 mg/kg reported. Arsenic and lead concentrations in deposited dust also exceeded the ASC NEPM HIL-A at two locations. The calculated air concentrations and deposition rates presented in Appendix G of the HHRA don't appear to have been completed accurately. If the Mine site is exceeding antimony and arsenic concentrations between 2022 and 2024 when operations are limited, how has it been calculated that the proposed operations, which involve doubling production on the site to be 37% less than what has already been recorded at this site?

7. The data assessed and concluded on has been clearly 'cherry picked' with assessments of larger areas to gain 'average' values and completely ignoring the extremely elevated levels of contaminants found in close proximity to the mine site. There are residential properties right on the boundaries of the mine's operational areas and the proposal involves bringing these operational areas even closer to these residential properties.

Another issue of concern is the lack of discussion or mention of PFAS assessment in HHRA. The Cadia gold mine in Orange NSW is currently under class action for PFAS contamination that has been identified within 17 km of the active mine's processing area. Where is Larvotto's assessment of this aspect?

The HHRA is inadequate and alarming. The results appear to indicate that the Hillgrove Mine has substantially contaminated land in proximity to the mine site boundaries and the current owner /

operators of the mine site are planning to expand and contaminate further areas of Hillgrove. A third party review of this HHRA would illustrate all the deficiencies detailed above.

This matter is a of great concern to Hillgrove residents as the mining activities may have, and still be, contaminating the whole Hillgrove township area. This will inevitably result in financial hardship to Hillgrove residents as land values will plummet along with the potential health concerns from continual exposure to these contaminants of concern.

Larvotto Resources need to complete a more comprehensive investigation in this area and prepare solutions to resolving current contamination issues before planning to expand their facility further.

NOISE ASSESSMENT

The noise assessment by Muller Acoustic Consulting assigns road traffic noise criteria for this project as 'arterial/sub-arterial road' category; however, the roads associated with this project are 'local roads'; assigned criteria under the RNP should be 55 dB LAeq(15hr) for day time, and 55dB LAeq(9hr) for night time.

This noise assessment has also been assessed on Haulage of ore from Garibaldi and Brackins Spur only occurring during the day shift only, via existing internal roads from the Garibaldi portal; not the stated 24 hours in the Modification Report.

It is difficult to grasp how a mining facility can reduce concentrate haulage volumes while double production quantities. Even with the 'optimised' operations of containerised (25t) haulage, how do does the mine propose to restrict heavy vehicle movements to a maximum of 3 loaded (25t) haul trucks per day; even operating 365 days per year that is only 109,500 t moved off site between 2027 and 2030, yet they are proposing 500,000 t extraction limits. It doesn't add up.

The noise assessment concludes that "there would be no net increase in vehicle movements associated with MOD 5, it is expected that there would be no increase to road traffic noise levels." This is inaccurate as there is a calculated 5% increase on these local roads in Hillgrove, and it is not detailed in any of the issued reports how the mine has 'optimised' their haulage operations and will achieve double product (up to 500,000 t/a) with the same or less heavy vehicle movements of extracted product leaving the site as what is being completed under the 250,000 t/a operations. The traffic assessment also does not outline the carrying capacity of the proposed concentrate haulage trucks. The noise assessment for traffic noise has not been conducted adequately.

It is questionable how the noise level criteria have been determined. There is minimal detail provided about the unattended noise monitoring conducted and for all time periods (day, evening and night) to have the same PNTL is quite unusual. It is requested that a third party review of this noise assessment is undertaken to ensure that modelling and calculations have been performed accurately has the conclusions and provided data appear flawed. It is suspicious that noise monitoring has been recommended by the consultant even though the assessed values are stated to be within the calculated acceptable limits.

The modelled noise levels for Phase 2 and Phase Construction period are concerning (refer to Figure E5 and E7) and there should be stringent measures recommended for managing these impacts; however, the outlined mitigation and management measures in this report are quite limited.

It is hard to believe that the 250,000 t/a of material proposed to be hauled out of the Metz mine and hauled along the Metz and Gorge Roads (as detailed in Table 2.2 of the Air Quality Assessment) that will be occurring 24 hours per day has been appropriately assessed. There is minimal vegetated buffer for on the eastern side of this haul road and the potentially affected residential receptors to the east; this assessment needs to be reviewed. Where is the detail indicating how many trucks per day would utilise this haul route? The noise assessment report indicates a total of four trucks per hour for

the proposed modification but it also outlines that Metz mine is under a separate development consent, does this mean the truck movements from the Metz mine haven't been considered in this assessment?

TRAFFIC ASSESSMENT

The operational hours stated in the traffic assessment (by Amber Traffic and Transportation) are not the same as the operational hours stated in the noise impact assessment or Modification Report.

The 40 seat coach buses are considered heavy vehicles under the Austroads Vehicle Classification guidelines, and TfNSW considers the 12 seater buses to be heavy vehicles under the Heavy Vehicle Authorised Inspection Scheme; as such, the assessment should be updated to reflect actual heavy vehicle movements anticipated.

The calculated traffic volume increase of approximately 5% is significant for a small regional area that only has local roads (i.e. Hillgrove is a small township, and Waterfall Way is approximately 5.9 km from the site entrance to the mine).

The traffic assessment puts forwards suggestions for Council on road improvements (refer to section 6.2) all road improvements on associated access roads for the mine (including public roads) should be upgraded and improved by Larvotto under any approved expansion. If the mine is increasing traffic volumes on local roads, they should be funding all upgrades / improvements to these local roads. This also includes the Stockton Road and Waterfall Way intersection issues discussed in Section 7.2. The road safety audit findings (Appendix A of traffic assessment) outline several upgrades / improvements that would be required for the relevant access roads.

The assessments performed for this modification application conclude that "there would be no net increase in vehicle movements associated with MOD 5; however, this is inaccurate as there is a calculated 5% increase on these local roads in Hillgrove. It is not detailed in any of the issued reports how the mine has 'optimised' their haulage operations and will achieve double product (up to 500,000 t/a) with the same or less heavy vehicle movements of extracted product leaving the site as what is being completed under the 250,000 t/a operations. The traffic assessment does not outline the carrying capacity of the proposed concentrate haulage trucks so how have they calculated potential pavement impacts associated with the proposed loads and determined the roads are suitable for these load capacities? They haven't demonstrated that the mine site will be generating a maximum of 3 loaded concentrate haulage trucks per day by outlining the size of the trucks used for this purposes and the exact quantity those trucks will be carrying. Where are the calculations demonstrating the total quantity of material to be transported offsite until the proposed end date of December 2030?

AIR QUALITY ASSESSMENT

It is unknown if the Air Quality assessment (by Zephyr Environmental) includes all mining operations. Figure 3.1 and 7.2 does not seem to include the haul road to Brackins Spur (for construction or operations).

The assessment report outlines in section 5.2.1 that there is no on-site continuous monitoring of PM10 and PM2.5 concentrations for the Hillgrove mine area, and in the absence of on-site this continuous data that Armidale data has been utilised and that it is considered 'conservative'. This is an extreme assumption. Armidale does not have a 24 / 7 mining operation on its door step, and Hillgrove also has domestic wood burning activities. Inappropriate data has been utilised for the modelling and as such the results of the modelling would not be accurate. With a proposal of this nature (i.e. doubling production) a suite of background air quality analysis in the potentially impacted area should have been conducted to make appropriate assessment of the potential future impacts.

The contour plots provided in Figure 8.1, 8.2, and 8.7 are not representative of all site operations and only appear to be showing results for the main processing area.

Appropriate background air quality monitoring needs to be conducted prior to modelling occurring to determine the actual air quality impacts that would be experienced by local residents. The air quality assessment should be re-done post background monitoring occurring.

On behalf of the residents of the Hillgrove township, please coordinate a more thorough assessment of the abovementioned issues, and cautious of the precedent you are setting allowing a development of this scale to be considered a development approval modification under Under section 4.55(2) of the Environmental Planning and Assessment Act 1979.

Regards,

Max Spinks
Hillgrove Resident.