To whom it may concern

Am writing to formally object to the Monaro Rock Quarry, application number: SSD-27223807.

I have lived in the Royalla area for 16 years and my home is approx. 1km to the Williamsdale Quarry rock face are approximately 2kms to the rock crushing area. The Williamsdale quarry is a large hard rock quarry owned by multinational company. I have had constant issues over the years with the quarry including, but not limited to dust, noise, power surges and brown outs, blasting impacts including to my home and boundary encroachments. I currently live with the fear that my worsening asthma symptoms are from quarry dust and that my life and the life of my family may one day be impacted by silicosis because of the cumulatively effects of dust I have breathed from the quarry.

Personal and community impacts

With that background, there is little doubt why I am totally opposed to yet another quarry in Royalla area. There are three other quarries in the immediate vicinity 20km radius of the proposed quarry). All quarries are not at capacity but are unlikely to say so because those companies in the industry will not seek to impact others. There is a direct risk to Williamsdale quarry that if it speaks its truth, it will not continue to get business with Monaro Mix, a local concrete business owned by Monaro Rock's family. It's a tangled web of business 'look after your customers' situation.

My home is approximately 8.5 kms South from the proposed Monaro Rock quarry. The addition of the Monaro Rock quarry would sandwich me and the ~ 1000 residents in my Royalla community in the wind corridor between Canberra and the southern high plains. My friends and community would be directly impacted and the overall feeling in Royalla is that this project is driven by pure greed.

I moved to Royalla for peace. I did not understand the reality of living next to a quarry (at that time it was more like to 2kms from my home). The dust, noise and blasting have been terrible and anything I leave outside is covered in dust the next day. Blasting has impacted my house including making cracks appear with regular movement of all pictures in the house from blasts. The noise is constant trucks accelerating uphill from standstill, dumping of aggregate and the rock crusher. My next-door neighbour moved to get away from the quarry as she had family members impacted by lung health and she

had poor lung health since moving to Royalla. Her new home is in Mates Drive Royalla, one of the most impacted properties in the proposal. I personally know 28 people who live closest to the proposed quarry who are truly devastated. At what human cost is this quarry and why does it need to be that close to so many families?

The quarry proposed is not just a quarry. It is one of the biggest quarries in NSW. It has a concrete recycling plant and an asphalt plan as part of the proposal. The size and scale and the inclusion of additional heavy industry not consulted with the community is ridiculous for a zoned rural residential environment on the border of thousands of ACT residents.

My community is devastated, I'm angry that the proposal was even considered state significant and I'm utterly dismayed about the EIS and its twist to spin a ridiculous story that Canberra needs the rock and the impacts can be green-washed away. I feel completely betrayed by this process.

Fact 1: The needs and benefit analysis that Monaro Rock has submitted are flawed

There are three quarries within 20km from the proposed Monaro Rock quarry. All quarries are currently operating under capacity. I request that formal assessment of capacity of existing quarries and current demand be assessed independently as I have anecdotal evidence that the 2-8 in the EIS has incorrectly stated the future demands and current quarry end of life dates. Considering the entire proposal with its significant negative impacts are based on the needs analysis, this should be a mandatory independent assessment criteria for NSW Planning. All current quarries have the opportunity to submit a proposal for expansion if the need exists. This has not been addressed at all in the EIS.

The ACT Government has recently announced limits on urban growth in the ACT¹. This article outlines how the government intend to use infill as the primary means of meeting future housing demand. Infill will not require the same per capita blue metal demand.

Fact 2: The zoning of this land prohibits the land use proposed

The NSW zoning of the land that the quarry is proposed on is RU2 – Rural Landscape and C2 - Environmental Conservation. These land types have the objectives of 'to maintain the rural landscape character of the land' (RU2) and 'to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values' and 'to prevent development that could destroy, damage or otherwise have an adverse effect on those values'.

The NSW LEP for these land zoning types **Prohibits:** Extractive industries, industrial scale, heavy commercial vehicle repair, hot mix asphalt industry and demolition waste management industry. All these industries are proposed, at scale, for the quarry site. There

¹ https://region.com.au/government-to-put-brake-on-city-growth-but-steel-urged-to-speed-up-reforms-to-unlock-land-for-housing/860691/ - Region, Government to put brake on city growth but Steel urged to speed up reforms to unlock land for housing.

is no amount of offsetting that can equate to the impact on the natural environment of these industries in this sensitive ecological and pristine environment.

It is abundantly clear the zoning of this land is completely incompatible with the proposal. Further, I am concerned how the detailed EIS was established without drilling or other prohibited activity on the land (neighbour reports say this has likely been occurring), indicating the proponent *may* not have been abiding by the LEP in the lead up to the submission. This should be investigated and considered as part of the overall assessment.

Fact 3: There is critically endangered habitat that that Monaro Rock will destroy

The EIS proposes the destruction of critically endangered Box Gum Grassy Woodland habitat. There are endangered flora and fauna in this area. As little as 5% of remnant Box Gum Grassy Woodland is left². This habitat is so precious, no removal of this habitat should be allowed under any circumstance. There is no possible argument that should enable the removal of such a critically endangered habitat. While this is enough said, Royalla Landcare and other associations will absolutely address this matter in more detail and their submissions should be considered with the highest regard. No possible mitigation is available for the loss of habitat and endangered flora and fauna. It's completely unacceptable for an unneeded and unwanted quarry.

The EIS quotes NSW Net Zero by 2050 policy framework but does not address the CO2 impacts of the cumulative effects of the quarry for a quarry that is not needed.

Fact 4: There is impact to thousands of residents of Tuggeranong, Canberra who have not been adequately consulted or considered in the EIS

The EIS has been developed against the Royalla residences and the foundations of the document are the impact on those in Royalla. In fact, ACT community has had limited consultation. There are residents less than 1km from the quarry boundary who live in Theodore ACT. There are approx. 18,000 residents in a 10km radius of the quarry. Theodore Primary School is 1.3km from the boundary of the property and approx. 2.3km from the quarry face (Attachment B). There has been limited attempt to cover the impact people living in this area by the EIS. The residents living in Theodore will by highly impacted by the quarry and most of them have no clue that the quarry is proposed. This is unacceptable. The EIS states that Theodore residents were interviewed (without saying who and how) and then says 'Tuggeranong (in the ACT about 13km by road) were interviewed and consideration was given to the potential social impacts of the Project on them. In general, the technical assessments concluded they are not close enough to experience significant airborne (dust), vibration, or noise impacts. This statement indicates these residents are 13 kms away, which is incorrect as seen in Attachment A. The EIS states it consulted with the Tuggeranong

https://www.lls.nsw.gov.au/help-and-advice/natural-resource-management/biodiversity/box-gum-grassy-woodland - NSW Government, Box Gum Grassy Woodland

Community Council but there are no further details and it is unclear how extensive the Tuggeranong's community consultation was in consideration of the close proximity of the quarry to houses and the potential airborne dust, noise and blasting impacts to these residents, as evidenced from my own lived experience.

Fact 5: There will be a reduction of property values in the area

A Canadian study on the impacts of quarrying on house values had significant evidence of impacts from 5% to 20% depending on proximity to a quarry³. Another study showed that "The external effects from the quarries cause a decrease of roughly 8.6% in property prices⁴"

The cumulative impact of my property being sandwiched between two quarries at the North and South flank will be evident and worsened if the quarry was approved. Royalla would suffer reputational damage as a rural residential location and would suffer property value impacts.

Fact 6: There are no suitable road options to the quarry and skewed data has been used for Monaro highway input

The Monaro Highway is a completely unsuitable exit point for the quarry at a blind road crest in an overtaking lane of a major highway that has extensive traffic. The Monaro is a busy and unsafe major highway with a number of documented black spots. The proposed quarry exit is in the most unsafe and unsuitable location on this road and will absolutely require a major speed reduction for an intersection of this size. A speed reduction will fundamentally reduce the usability of the uphill (approx. 300m elevation over the distance from the Johnson Drive roundabout) overtaking lane on the Monaro meaning dangerous overtaking will occur in other places. There are no other overtaking lane for many kilometres heading South.

The construction route via Mates Drive and Monaro Station Road is completely unsuitable being a low volume quiet residential street ending in a dead end. There is no trough traffic on these streets and they have been built to that standard/specification. They are completely unsuitable for heavy vehicles of the numbers needed for quarry construction and even more unsuitable for extended use as a major quarry thoroughfare if Monaro Highway access is not provided. Children also catch the school bus along these streets.

Of note, the EIS used road data from 2021 for its studies, at the time of Covid and lockdowns. This is flawed data and does not represent current traffic volumes.

³ https://www.aicanada.ca/article/property-value-impacts-occasioned-by-aggregate-extraction-operations/ - Canadian Property Evalusation

 $^{^4 \, \}underline{\text{https://www.sciencedirect.com/science/article/abs/pii/S0264837717304556}} \, - \, \text{Estimation of external effects} \\ \text{from the quarrying sector using the hedonic pricing method} \\$

Fact 7: The EIS does not adequately address the sever risk potential for runoff or spills

The proposed quarry will need to maintain a significant fuel storage facility not clearly quoted but expected to be in the +80,000lt of diesel. Oil for the facility with the vehicles and equipment on site would also need to be extensive. Waste oils and run off of diesel would be proportionate to the vehicles on site and it is impossible to contain all waste oil and fuel across the entire quarry site. This area is part of the Murrumbidgee River catchment area and creeks in the area run off to lake Tuggeranong. At time of high rain, sediment dams will not hold the capacity to stop run off. These contaminates will end up in the Murrumbidgee River catchment area and ultimately reduce the quality of the water in Lake Tuggeranong (already an issue) and in the Murrumbidgee. This is an unacceptable risk to the environment with 1lt of oil risking the contamination of 1,000,000 litres of water.

Sediment runoff from the quarry itself is also a significant risk to the catchment area and to the ecologically values of the Canberra Nature Parks and reserves in the immediate vicinity (to the North and North West.

Fact 8: There are humans that are directly impacted and whose lives will never be the same again

I have a number of friend and some family that live in close proximity to the proposed quarry. To say they are devastated is an understatement. Many of my friends are showing signs of metal anguish over the quarry proposal. One has confided in me that she is unable to speak about it, as doing so is causing such mental anguish, she feels like she will have a mental breakdown. This is not fair and not ok. There is huge research on the cost of mental health impacts. Nothing has adequately addressed resident's concerns to the point that Monaro Rock has proposed a Royalla fund to offset impacts. This is a total farce and the human costs is not truly understood. Royalla and its close-knit residents cannot be bought out with sufferance money. The community wants for nothing except peace, tranquillity and no new quarry.

Fact 9: There is a compounding risk of silicosis and ultrafine particles for Royalla and Tuggeranong residents

EIS outlines the limit of testing is 1.5km which is not appropriate since residents within 1 km from my home (over 2km from the much smaller Williamsdale Quarry) and feel the blasts and experience dust impacts.

Royalla is a windy place. It is far windier than Canberra and has an afternoon Southerly wind that comes from cold air from the Snowy mountains, funnelled down to the high plains of Royalla. In the EIS Air Quality Assessment (Appendix B), the data used is wind data from Isabella Plains for modelling dust and silicosis risk. Isabella Plains is at much lower altitude and far more protected than the high plains of Royalla. A more accurate wind analysis would be from the Wunderground (www.wunderground.com.au) semi-professional weather

stations of residents in the area (there are a few) – see Attachment B, or via a moderated Mt Ginini wind observations which are $93\%^5$ higher than Isabella Plains with wind gusts far exceeding Isabella Plains.

Scapeworks Australia Safety Data Sheet states in its Aggregates and Blue Metal are "harmful by inhalation" and "repeated inhalation of dust (bio-aerosols) from these products may result in respiratory irritation, inflammation or sensitisation resulting in illnesses ranging from hay fever and asthma to pneumonia (eg Legionnaire's disease) and pneumonia-like illnesses. It may also cause scarring of the lung (silicosis), lung cancer, chronic bronchitis and increase the risk of scleroderma (thickening of the connective tissue) and kidney disease"⁶. This may be why the EIS shows Royalla as having a higher percentage of residents with cancer (page 52,EIS Social Impacts) and a higher level of asthma (page 53, EIS Social Impacts) with current exposure to Williamsdale quarry.

Silica dust exposure has a cumulative impact and becomes more lethal when exposure is greater. Having permanent resident and schools within such close vicinity of the quarry is incredibly dangerous. The proposal does not include any real time monitoring of the silica dust not does it adequately address how dust will be suppressed.

"Inhalation of crystalline silica during the use of commercial products containing quartz is thought to be the primary route of exposure for the non-occupationally exposed (i.e. general) population" and "The risk of lung cancer was significantly elevated among those with longer duration of exposure and longer latency" 7 . The Wedron Illinois silica exposure investigation outlines, "There is no evidence of a safe level of exposure <to silica dust> or a threshold below which no adverse health effects occur" and states" In occupational settings, particles that are 4 μ m or less are considered the respirable particle fraction for crystalline silica" and "There is also evidence that long-term exposure to PM 2.5 can cause an increase in mortality (i.e., all-cause and cardiovascular), respiratory symptoms, incident asthma, and pre-term birth, and reductions in birth weight, and pre-term birth with long-term mean PM 2.5 concentrations in the range of 10–32 μ g/m3 [EPA 2009, 2012]" .8 In fact, Safe Work Australia has introduced a safe exposure time limit for working with silica stating "WES for RCS is 0.05 mg/m³ (eight-hour time weighted average). The WES must not be exceeded"9. In the published report 'How far can respirable dust travel' it states that particles of 5 microns

⁵ <u>https://www.bom.gov.au/places/act/mount-ginini/</u> - Historical average comparison between Mt Ginini wind to Isabella Plains wind.

⁶ https://scapeworksaustralia.com.au/wp-content/uploads/2022/01/SWA-SDS-Aggregates-and-Blue-Metal-.pdf

⁷ https://www.ncbi.nlm.nih.gov/books/NBK304370/ - Silica dust, crystalline, in the form of quartz or cristobalite

⁸ https://www.atsdr.cdc.gov/HAC/pha/WedronSilicaExposureInvestigation/Wedron_IL_Silica_EI_HC-508.pdf - The Wedron Illinois silica exposure investigation

⁹ https://www.safeworkaustralia.gov.au/safety-topic/hazards/silica/whs-duties-silica/workplace-exposure-standard-respirable-crystalline-silica - Workplace exposure standard for respirable crystalline silica

(known to cause cancer risk) can travel 6.2 miles (9.9 kms) ¹⁰. This evidence indicates that areas around the proposed quarry, including Royalla, Fernleigh and Tuggeranong have a significantly higher risk of silica exposure beyond the limits set by health authorities.

Fact 10: If approved, there are impacts to council and agencies that are under-resourced

I have personal experience in having quarry related complaints managed and not one of them has been a good experience. Councils have limited jurisdiction. All complaints must be managed between the Council and the Environmental Protection Agency. EPA and Council are under resourced and cannot meet the might of huge companies unless breaches are significant or obvious. This means that monitoring becomes mostly self-monitoring and EPA or EIS breaches will absolutely go unnoticed, unreported and unable to be dealt with. My experience has been that I never hear the outcome of complaints. I sometimes get initial responses but that is all and I am left wondering if anything was done and seeing no visible sign that anything has improved from a complaint process.

Fact 11: There are far greater areas of suitability for quarrying than the land proposed

The blue metal proposed to be quarried is available across a significant area to the South of the quarry. Should a genuine need exist for additional extraction that is not able to be met by existing quarries (including expansions) then sites away from density of South Tuggeranong and rural residential living areas of Fernleigh and Royalla should be considered. These could include extensive rural and limited residential land in the Cooma to Canberra corridor.

Fact 12: There are significant under-assessed ground and surface water impacts

I do not believe the proposal has met the Secretary Environmental Requirements relating to water usage. The project proposed an annual drawdown of ground water of 42.4ml (128 average households of water use). That figure seems low in comparison with the amount of area for dust suppression and the heavy water use in dust suppression for rock crushers and other onsite. A quick chat GTP search for expected water usage when the expected quarry industries are entered has a low estimate above the amount of water in the EIS and a high estimate twice the amount. I cannot believe that there is 'enough' ground water for what is proposed with two other quarries in the immediate vicinity. This proposed quarry will risk every local landowner that has a bore.

Other impacts not adequately addressed in the EIS:

- Bushfire risk with the amount of fuel and oil on site
- Natural disaster risk with Canberra listed as an area for several natural disaster risks increasing

¹⁰ <u>https://www.nosilicadust.com/how-far-can-respirable-dust-actually-travel/</u> - How Far Can Respirable Dust Travel, 09/2019

- Spill management on-site
- Human waste water management at the site
- Impact to the phone tower on Enchanted Hill
- Overall electricity usage and impacts to the electricity grid considering it took 20+ years for this to be semi-addressed at Williamsdale quarry (morning brown-outs still occur at my house), resulting in severe brownouts and electrical issues for residents in Royalla
- Carbon offsets for the quarry vehicles and machinery
- Road impacts to Old Cooma Road during the construction period
- Dust impact to the Aboriginal scar trees at the site (one of which is perilously close to the quarry face)
- Dust impacts to other flora and fauna in the area
- Impact of bridge works for the proposed road to meet Monaro highway
- Cumulative impacts of risks of ultrafine dust and silica on Theodore school children and children living in the Theodore area
- Visual impacts with limited information about the visual screening and the
 placement of the hundreds of thousands of overburdened soil and unused rock
 mountains that will be created.

Formal requests:

That the Monaro Rock Proposal be assessed by the NSW Independent Planning Commissioner

- That the needs analysis be independently assessed based on existing quarries and formal advice on road expansion in the ACT over the period forecast for the quarry life
- 3. That proper consultation occurs with ACT residents that will be affected if the quarry goes ahead. This should include but not be limited to all residents within a 10km radius of the quarry. This would enable consultation with affected residents in Tralee, Fernleigh and Googong. Engagement should include letterbox drops with follow-on genuine community consultation.
- 4. That a genuine independent ground and proposed site water assessment be conducted that includes the impact to ACT waterways and Murrumbidgee River catchment area.
- 5. That wind and dust impacts be assessed using data from the Royalla region weather stations or moderate data from Mt Ginini BOM weather station.
- 6. That the impact to ground water and run off from the full range of industries on site (including heavy commercial vehicle repair and fuelling of on-site mine vehicle) be reassessed.

- 7. That a more fulsome road and road safety impact be done that does not use data skewed by Covid or other uncharacteristic time periods. Usage periods should include for snow traffic which is heavy right through the snow season.
- 8. That a mental health impact study be done on the effects of new quarries on those living close to new quarry sites or for the EIS to reference appropriate research to this effect.

If you have any questions in regard to this submission, please contact me.

Yours sincerely,

Name and address withheld

Attachment A: Google maps measurement from Theodore houses to proposed quarry boundary

Attachment B: Google maps measurement from Theodore Primary school to proposed quarry boundary

Attachment A: Google maps measurement from Theodore houses to proposed quarry boundary



