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EXPERT REVIEW REPORT ON SOCIAL IMPACTS

Mount Pleasant Optimisation Project (SSD-10418) NSW Independent Planning Commission Public Hearing

1. My expert report relates to the social impacts of the proposed Mount Pleasant Optimisation Project (SSD-10418) (**Project**) by MACH Mount Pleasant Operations Pty Ltd (**Applicant**), a joint venture between MACH Energy Australia Pty Ltd and Japan Coal Development Australia Pty Ltd. The Project has been assessed by the Department of Planning and Environment (**Department**) and referred to the Independent Planning Commission (**Commission**) for public hearing and determination. This is an independent evaluation and report aimed to assist the decision maker for the Project.
2. I, Dr Hedda Haugen Askland (Cand.Mag, MSocSci, PhD), have read Division 2 of Part 31 of the *Uniform Civil Procedure Rules 2005 (UCPR)* and the Expert Witness Code of Conduct in Schedule 7 of the UCPR and I agree to be bound by it. I understand the public hearing is not a Court proceeding but am of the view that the same Code of Conduct should adhere in the context of the Commission. I wish to reiterate that I do not act as an advocate for any implicated by the Project and that any opinion expressed is based on my professional training, knowledge and experience.
3. I am a qualified social researcher and have been working with local coal-affected communities in New South Wales (**NSW**) since 2015. I am employed as a Senior Lecturer (Anthropology) at the University of Newcastle, where I am conducting long-term ethnographic project with mining-affected communities in the Upper Hunter, Mid-Western and Mid-Coast Regions of NSW. A copy of my curriculum vitae is provided as Appendix 1.
4. In preparing this report, I have reviewed the documents listed below.

Environmental Impact Statement

- Executive summary
- Section 3 – Project Description
- Section 6 – Engagement
- Section 7 – Environmental Assessment
- Section 8 – Evaluation and Conclusion
- Appendix N – Social Impact Assessment

Response to Submissions

- Submissions Reports: Request RTS (19 Mar 2021)
- Submission Report: Att G & H
- Submissions Report – Main Text and Att A to F
- Submission by Lock the Gate Alliance (17 Mar 2021)

Relevant Agency Advice

- Advice on EIS – Muswellbrook Shire Council (22 Mar 2021)
- Advice on RTS – Muswellbrook Shire Council (26 July 2021)
- Advice on EIS – NSW EPA (17 Mar 2021)

Department's Assessment Report

- Department's Assessment Report
- Recommended Conditions

Analysis of these documents have been conducted in the context of the existing body of scientific literature on the topic of social impact and social impact assessment, as well as social science scholarship on land use change, land use conflict, mining, development, identity, belonging, place, place attachment, climate change induced displacement and resettlement (**CCID**), and development induced displacement and resettlement (**DIDR**).

EXECUTIVE SUMMARY

5. In this report, I present a review of the various documents related to the Social Impact Assessment (**SIA**) for the Mount Pleasant Optimisation Project. In light of the evidence presented in these documents, I contend that **the social impacts of the proposed Project are significant and that the proposed mitigation strategies are ineffective**. A key issue is the proximity between the proposed mine and private residents and the township of Muswellbrook and Aberdeen, and the impact that the

mine will have on people's health and wellbeing, culture sense of place and community. I have significant concern about the social impacts related to amenity (noise and dust) and visual impacts, the depopulation of neighbourhoods and rural villages, impacts on landscape as heritage, and distributional equity. There is extensive scholarship on the link between environmental destruction and mental health and wellbeing, particularly in relation to solastalgic distress (e.g. Albrecht 2005; Askland and Bunn 2018). The extended timeframe of operation (22 years) will constitute a significant risk for enduring, and likely exacerbated, environmental and social stress for a population that is already enduring both solastalgia and more general environmental distress. For many, the forthcoming closure of operation at Mount Pleasant (2026) offers hope for an alternative future, regeneration and reestablishment of lost communities. This will be dismantled should the Project be approved, with a strong likelihood for further displacement and dispossession.

6. The Project will have significant adverse impacts on the visual amenity and rural quality of Muswellbrook and the surrounding villages. Whilst the community already endures significant negative social impacts of current coal mining operations (including the approved Mount Pleasant mine), the extended life of the project from 2026 to 2048, and the doubling of run-of mine coal (**ROM**) extraction from 10.5 million tonnes per annum (**mtpa**) up to 21 mtpa, will present long-term adverse impacts on community and particular demographic groups in the area, and significant impacts on competing uses in of the land of the mine, including agriculture. The construction and operation of the Project, as well as transportation and combustion of the coal from the mine, will result in significant air pollution that can compromise human health and result in emissions of greenhouse gases, which contribute to climate change. In the context of climate change, localised risks of climate change hazards, such as drought and bush fires, are increasing. These hazards will exceed the experience of adverse social impacts from the mine, particularly dust and air pollution.
7. The SIA conducted for the Project confirm that the local community are already enduring significant negative impacts from the current Mount Pleasant operation. These adverse impacts will continue, and potentially be exceeded, if the Project is approved, with likely further displacement of the smaller rural communities surrounding the mines, decrease in social cohesion, and tensions within and potential rupture of the local community. Opportunities to move forward on a pathway towards a post-mining future and build a just transition will be delayed and potentially lost.
8. The mitigation strategies that have been put forward to deal with the adverse impacts are inadequate. The failures of these strategies to redress the harm done to local residents and community are evidenced by the social baseline, which offers an evaluation of the social impacts of the current operation at Mount Pleasant. Whilst the mitigation strategies that address economic impact as it relates to employment, training and community contribution (including the Voluntary

Planning Agreement (**VPA**) and Aboriginal Community Development Fund (**ACDF**) may go some way in addressing some of the impacts, the mitigation strategies proposed for impact that relate to place-based variables are insufficient. The arguments proposed about reducing impacts through the scaffolded construction and 'natural' rehabilitation design are contentious and the SIA indicates a significant lack of trust in the mine's final mine design and environmental mitigation. Rather than mitigating impacts, some of these strategies, including the proposed Eastern Out of Pit Emplacement, may themselves be an intrusion and do not offer a solution that incorporates people's lived experience and connection to Muswellbrook and the Upper Hunter as a place.

9. The Project presents a moral concern regarding the weighting of social, economic and environmental impacts, which require valuation of social, economic and environmental costs and benefits as they manifest within different locations. There is a distinct inequity embedded in the development, which exposes some parts of the population (landholders in the rural villages next to the mine, women, Aboriginal people and people in low-income household) to distinct impacts, which is not adequately accounted for.
10. This inequity is mentioned in the SIA but undermined through the layers of reporting of social impacts in the overall EIS, resulting in a muting of adverse impacts. Although the SIA recognises the interconnected nature of social, environmental and health impacts, and presents a comprehensive analysis of the connections between social impacts, environmental impacts (including noise, dust and lighting), landscape change and heritage, the overarching EIS treats social impacts as separate to the environmental impacts of the Project and the changes that the mine will present, both short and long term, to the landscape. The details in the SIA about the social impacts and the significant risks that are identified, particularly in relation to place attachment, livelihood, community and wellbeing, are undermined in the general presentation and summaries of social impacts in both the SIA and the broader EIS.
11. The muting of social impacts and the interconnected nature of environmental and social impacts carry across to the Department's Assessment Report. The Department has failed to appropriately assess the Social Impact Assessment (**SIA**) conducted by the Proponent. Despite the significant social impacts that the Project will have, the Department places social impacts within the category of 'other' and dismisses the severe adverse impacts that the Project will have. The Department places the Proponent's economic considerations higher than the social, environmental and economic considerations of the community.
12. The failures of the Department to adequately recognise the social impacts of the Project has resulted in a severe omission in the draft Development Consent, and there is no requirement for a Social

Impact Management Plan (**SIMP**). Considering the severity of the impacts projected, a SIMP must be built into the Development Consent should the Project be approved. Furthermore, due to the high likelihood for future displacement of local community due to acquisition of rural properties in the small villages surrounding the mine and ongoing adverse impacts, legacy acquisition/mitigation rights should carry over to the Project.

ASSUMPTIONS AND QUALIFYING STATEMENTS

13. The SIA was conducted in line with the 2017 *Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development (September 2017)* (NSW Government 2017). This guideline has since been replaced by the 2021 *Social Impact Assessment Guideline for State Significant Projects (November 2021)* (NSW Government 2021). I will use the 2021 guideline as the premise of my review.
14. The NSW SIA Guideline for State Significant Projects (2021) set up the central tenants and my assumptions about what a social impact is and how it should be assessed. This includes:
- i. State significant projects can affect people in many ways, both positively and negatively. People can endure positive or negative experiences, or both.
 - ii. A 'social impact' refers to the consequence that people experience when a development project brings change.
 - iii. For the purpose of an SIA, 'people' are classed as individuals, households, groups, communities and organisations.
 - iv. Social impacts can occur across a range of categories, including: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods and decision making system (cf. NSW Government 2021, pg. 19).
 - v. Social impacts are closely interconnected to environmental, economic, heritage and health impacts. This interconnectedness warrants an integrated assessment.
 - vi. SIAs should adhere to the following key principles: action-oriented; adaptive; culturally responsive; distributive equity; impartial; inclusive; integrated; life-cycle focus; material; precautionary; proportionate; rigorous; and, transparent (cf. NSW Government 2021, pg. 10).
 - vii. Impacts can be negative, positive and/or cumulative (cf. NSW Government 2021, pg. 20).

SOCIAL IMPACT ASSESSMENT

15. A detailed SIA was conducted as part of the Environmental Impact Assessment (EIA) for the Project. The New Zealand based management consultancy, Just Add Lime Ltd, prepared the SIA on behalf of

the Project proponent, MACH Energy. Just Add Lime Ltd conduct work in both New Zealand and Australia, providing services such as strategic business planning, business alignment, processes and systems, risk management, lifecycle analysis, asset management improvement and strategy support, social impact assessment and stakeholder and community engagement. The SIA was managed and prepared by Rachel Mass, a SIA practitioner with formal qualifications and 20 years' experience in infrastructure, mining and urban projects in both New Zealand and Australia. Ms Maas has previously worked in the Hunter Valley region as the first dedicated community relations specialist at for Mount Arthur Coal.

16. The SIA (EIS Appendix N) offers a comprehensive and rigorous analysis of existing social impacts of the approved Mount Pleasant operations and the projected social impacts for the Project. There are a few elements of the analysis that could have been strengthened (see: 49-53, and discussed throughout this report) and some issues have been missed (see: 54-58), but, overall, the SIA is of excellent standard and in line with the expectations of the *2017 Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development* (NSW Government 2017).
17. **The findings of the SIA are undermined in the multiple summaries that frame the broader EIS (including the Executive Summary, Section 3 – Project Description and Section 8 – Evaluation and Conclusion, and Response to Submissions) and, of particular concern, is the lack of detail on the SIA in the Department's Assessment Report.** These summaries do not adequately present key findings of the SIA including: (i) the identification of a significant amount of adverse social impacts across **all** social impact categories (way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, decision making systems), (ii) identified social impacts rated as likely, highly likely or almost certain, with high, very high and extreme severity ratings at major and significant consequence level, and (iii) the proposed mitigation strategies indicating negligible change in ratings for most impacts.
18. The significant social impacts of the current operation and those identified and predicted for the Project, as well as failures of mitigation strategies to address these, are summarised in Table 1, Table 2 and Table 5, and discussed throughout this document. Here, I will draw attention to the language used in the EIS, so to illustrate the **significant undermining of social impacts that characterise the overarching EIS**. In the summary of social values and community infrastructure in the Executive Summary, it is stated that:

The Project Social Impact Assessment identified the potential impacts of the Project as a continuation of the social impacts currently being experienced from the Mount Pleasant

Operation. The Project would extend the life of the Mount Pleasant Operation and, therefore, would extend any associated existing impacts on wellbeing and quality of life, culture and community cohesion that are perceived in the local community. Negative social impacts would continue to be experienced by people in close geographical proximity to the current operation, while positive social impacts would continue to be experienced generally over the same and wider geographical area (Executive Summary, pg. 24).

19. The language adopted around social impacts in this quote and throughout the EIS is highly problematic and leads to the assumption that negative impacts are relatively minor and only endured by near neighbours and positive impacts are major and endured by the overall community. It requires that the reader takes the time to carefully read the RTS and the full SIA, including all appendices, to see the gravity, extent and significance of the negative impacts and the issues around distributional equity that emerges from the economic benefits of the project.

20. SIA includes 20 appendices (Appendix A-T), of which particular attention should be given to Appendix M-Q. These appendices offer the details for the social baseline and the identification, prediction and evaluation of the social impacts of the Project:

- Appendix M – Social Baseline Study Part A Social Area of Influence
- Appendix N – Social Baseline Study Part B – Indicators of Social Impacts
- Appendix O – Social Impacts of the Current Mount Pleasant Operation
- Appendix P – Assessment of Potential Social Impacts – Project Planning/SSD Application
- Appendix Q – Assessment of Potential Social Impacts and Provisional SIMP – Project is approved

21. As required, the SIA provides a no-development scenario (Appendix R), which assesses the potential social impacts if the Project is not approved. This assessment is one of the main weaknesses with the SIA as it is based on an either-or analysis and, as such, does not take into account the spectrum of possibilities for growth in other industries and alternative projects that commence in light of a rejection of the proposed Project. Considering the targets for transition and work currently under way to diversify the local and regional economy in Muswellbrook LGA and the Upper Hunter Valley more broadly (e.g. Weller, Beer, Porter & Veitch 2020; Muswellbrook Shire Council 2022), this is a significant shortcoming. Furthermore, since the EIA was completed, the baseline has changed with key events including: (a) the 2021 NSW State Government announcement of a \$25 million Royalties for Rejuvenation fund that will drive job creation and provide support for coal mining communities as they move to a clean energy economy (NSW Government 2021b); (b) the Hunter Joint Organisation's collaboration with AGL and advocacy for a Hunter 2050 Foundation, which will work towards

economic diversification and transformation and seek to attract new industries and opportunities in the scaling down of thermal coal mining (Hunter Joint Org. 2020); and, (c) announcement in June 2022 that BHP will close Mount Arthur coal mine in 2030 instead of 2045 after failing to sell (Lapham, Bernasconi and Murphy 2022) Mount Arthur 15 years before scheduled. The analysis presented in Appendix R and associated claims of negative impacts of the no-development scenario should be dismissed as there is no recognition of already planned and scheduled alternative industry development and strategies for transitioning.

22. The Project is a brownfield development application – assessing social impacts in brownfield scenarios can be challenging as the pre-existing operation may skew the social baseline to the benefit of the Proponent and lead to a dismissal or reduced assessment of significance of adverse impacts should the project go ahead. These types of assessment can also lead to a misleading assessment and apprehension of adverse impacts should the Project not be approved because of the lack of consideration of contextual factors (noted above) and a tendency to assume that non-approval means an abrupt end to existing operations (rather than considering possibilities for industry and workforce transition). These shortcomings in the SIA are evident in the assessment of potential social impacts for the Project in both the scenario of approval and non-approval, examples of each are outlined below:

Scenario I: Project is Approved – adverse impacts underestimated:

- **Displacement of rural villages:** The rural communities closest to the Mount Pleasant Operation have gone through a gradual decline since the mid-1990s when Coal and Allied started acquiring the land for the Mount Pleasant Operation mining leases. At least 28 properties were acquired for the Mount Pleasant Operation Mining Lease, in addition to properties already obtained by the Dartbrook Joint Venture, Bengalla Mining Company or Coal & Allied. Land acquisition has continued since MACH Energy's purchase of the Mount Pleasant Operation, and it is estimated that MACH Energy has acquired 11 properties in the area since purchasing the Mount Pleasant Operation from Rio Tinto in 2016 (SIA Appendix N, p.98). These rural communities have already been ruptured and, as evidenced by the material presented in the SIA, local residents are already adversely impacted by the loss of neighbours, family and community. What is left within these smaller villages are remnants of past communities with their unique character and history. If the proposal goes ahead, more private landowners in these communities will gain acquisition rights. In the context of an already displaced community, the severity of losing additional long-term residents who remain in the area will be significant, exacerbating the social impacts already endured by those who remain and likely increasing experiences of social isolation and loss. Unfortunately, in brownfield impact assessments, these types of social impacts are frequently ignored or underestimated, as in this SIA. This is a result of assuming the baseline is the current

operational context, as opposed to the current community context which has already experienced significant adverse social losses and change. In fact, in these already socially denuded contexts, the impacts of further population loss can be even more severe in consequence for these communities (cf. Askland 2018).

- **Impacts on amenity:** Significant adverse impacts on amenity, particularly in relation to visual impacts and air pollution, are already being endured by the community. As in the case above, this SIA considers the impact of the new Project as a ‘continuation’ of these impacts and Project design mitigations are presented as ‘improvements’, creating a perception of lesser severity than in a greenfield scenario. This is misleading as any component of the new Project’s design, including what is presented as mitigating design (such as the integrated waste rock emplacement landform), is nonetheless a change that can have adverse social impacts that need to be adequately assessed and not assumed to be an ‘improvement’ or ‘reduction’ of existing operational impacts. Furthermore, these types of social impacts from a continuation of existing operations in brownfield scenario must be presented and assessed in a temporal perspective; the compounding implications of living with dust and visual impacts for an additional 22 years on top of the current approval are significant from a social perspective yet this has been overlooked, or at best, underestimated in the SIA.

Scenario II: Project is Not Approved – adverse impacts over-estimated:

- **Employment opportunities and community benefits:** One of the positive social impacts are the direct and indirect employment opportunities that will come from the proposed Project. In the instance that the Project is approved, there are significant potential community benefits through Voluntary Planning Agreements (VPA) and an Aboriginal Community Development Fund (ACDF). But in the scenario of the Project not being approved, the adverse impacts associated with employment and community are over-estimated as these are presented in an either-or scenario where it is seen as loss of jobs and community contributions when, in fact, these are not existing at present. Various factors, including automation, may change the employment scenario and other opportunities for employment and schemes that can lead to community benefit may occur in the wake of mine closure, especially in the context of Point 5 above. Furthermore, any discussion about future work and employment in the context of non-approval requires consideration of the mine-closure work that will commence in 2026, that is part of the current

approval.¹ It is therefore important not to imply that a rejection of the development application will result in the *loss of direct employment at the mine for an average of 600 people, and up to 830 people, or the loss 450 direct/indirect jobs in the Upper Hunter, and 650 in the wider Hunter region* but, rather, that a rejection will see the estimated cessation of the Mount Pleasant workforce as per the current approval and planned operation, and a mine-closure social impact management plan must be developed to identify how to support this workforce to limit the impacts of this employment transition.

23. The extended timeframe that the Project proposes for mining at Mount Pleasant (from 2026 to 2048) and the doubling of extraction (from 10,5 mtpa to 21 mtpa) has not been adequately captured as a social impact in the SIA. It is important to recognise the temporal dimension and the severity that the additional 22 years of operation will have on the local community. The implications of this are evident when looking at the significant negative impacts that the current Mount Pleasant operation is having on local community and landholders.

24. Although the Mount Pleasant Operation was approved in 1999, mining did not commence at Mount Pleasant until 2017. In 2018, the MOD3 was granted, extended the timeline of the operation to 2026. At the time when the SIA was conducted, coal had only been extracted at Mount Pleasant for three years (see Figure 1).

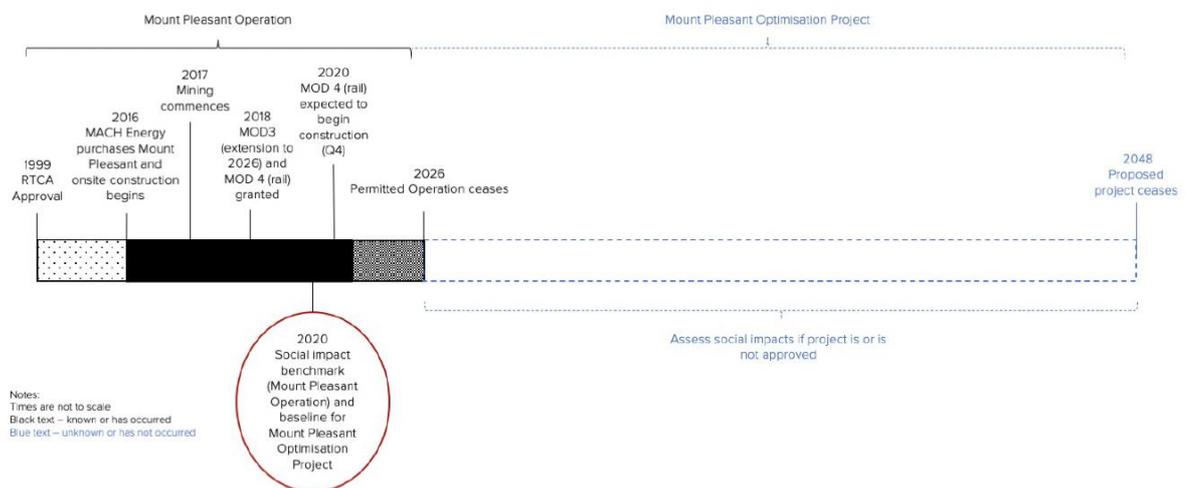


Figure 1: Context of the assessment of social impacts of the Mount Pleasant Operation (copied from: EIA Appendix N, Figure 6, page 18)

¹ No modelling is presented in the SIA of the mine closure/rehabilitation program for the approved operation. Drawing on the discussion of post closure in the SIA Appendix Q (p.68) it is, however, expected that this will present work opportunities for over 100 people (the Project is anticipated to employ approximately 128 people in the post closure phase, which will be a five-year program).

Despite its short duration, the adverse social impacts of the Project are significant, and the SIA indicates that the mitigation strategies adopted have little, if any, effect. Furthermore, some strategies—such as the VPA and the ACDF—which are forwarded as successful mitigation may have resulted in positive community outcomes, even, in some instances, significant benefits, but these do not mitigate the adverse impacts endured by the community. Such strategies, as well as community consultation, engagement and contributions, are examples of corporate social responsibility and good corporate citizenship and they may build positive relationships with community groups, organisations and, at times, the broader community. They may contribute to a mine’s ‘social licence’ but they do not automatically mitigate the impact or reduce the adverse experience endured by community, individual landholders, residents and stakeholders of the project.

25. In relation to the current operation at Mount Pleasant, for example, it is evident that, since purchasing the mine in 2016, MACH Energy has established a sound relationship with some community stakeholders, including local suppliers (SIA, Appendix I) and some members of the Aboriginal community (SIA, Appendix J), and the SIA indicate that MACH Energy has employed some positive community engagement initiatives that have offered a positive experience for some affected stakeholder groups. In the SIA, there is a clear separation between these positive impacts resulting from the partnership that has grown between MACH Energy and the local Aboriginal community and local suppliers, and the negative impacts linked to the permanent change to the land or other adverse environmental impacts. In the assessment of the impacts (Appendices O-Q), however, these activities are presented as mitigation strategies. To imply that activities such as, for example, undertaking cultural burns on country, or opportunities to practice Aboriginal culture at the Mount Pleasant Operation mitigates the social impacts endured due to landscape change is borderline offensive.

PREDICTED SOCIAL IMPACTS

26. The SIA presents a comprehensive overview of the social baseline and, based on my analysis of the quantitative and qualitative data presented in the SIA Appendices F-I, Appendix L and Appendices M-N, as well as my own research with mining communities in the Upper Hunter, I believe the SIA has identified the key consequences that the Project will bring and offers a comprehensive prediction of social impacts. However, as mentioned above, there are some shortcomings in the analysis and, in particular, the issue about the prolonged duration of the mining operation at Mount Pleasant and the doubling of ROM coal has not been adequately addressed. I have identified some additional issues that are predicted social impacts, and I opine that the extended duration of the Mount Pleasant operation resulting from the Project must be problematised as a social impact (below).

27. The SIA includes assessment of:

- Social Impacts of Current Mount Pleasant Operation (Appendix O)
- Assessment of Potential Social Impacts – Project Planning/SSD Application (Appendix P)
- Assessment of Potential Social Impacts and Provisional SIMP – Project is Approved (Appendix Q)
- Assessment of Potential Social Impacts – Project is not Approved (Appendix R)

The assessment of the current operation (Appendix O) and the assessment of potential social impacts if the Project is not approved (Appendix R) do not include an update social risk/opportunity rating.

28. With the social baseline incorporating the current operation at Mount Pleasant it is essential to carefully consider the baseline and recognise the impacts that the approved project has on the community. Whilst there are the challenges associated with a brownfield mine discussed above, the brownfield character of the Project also offers fertile ground for recognising the severity of the social and environmental impacts identified for the Project and to evaluate the likely success of proposed mitigation strategies. Because of this, I present in Table 1 an overview of the adverse impacts endured because of the current Mount Pleasant operation, and summarise the adverse social impacts identified in the SIA Appendix O rated with a *significant* or *moderate significance/consequence*, *likely* or *almost certain likelihood*, and *high* or *extreme rating*. Because of the lack of a social risk/opportunity rating (see above), I include a commentary and evaluation of the appropriateness and success of the mitigation strategies employed. The full evaluation of impacts and mitigation strategy is available in the SIA Appendix O.

29. Table 1 includes only the adverse circumstances identified as part of the baseline study and I exclude the benefits. This is because of the impetuosity of the SIA to advance strategies to avoid, minimise and mitigate negative impacts (NSW Government 2021: 9), and the failure to recognise these in the broader EIS documentation and the Department's Assessment Report. Whereas the EIS and the Department's Assessment Report both emphasise the existing positive impacts (employment and economic revenue) of the current operation, the existing negative impacts are undermined. An overview of the positive impacts can be found in SIA Appendix O, with a discussion of these in Appendices M and N.

Table 1: Overview and commentary on adverse social impacts from current operation

*Mitigation not required under current approval

Data in SIA indicates mitigation success: ● yes ● some ● no

Impact category – Impact	Duration	Social Risk rating [Significance/ Consequence, Likelihood, Rating]	Mitigation	Comment
Way of life – Housing availability, appropriateness, affordability	Life of operation	Significant, likely, extreme	None*	This impact has a positive counterpart, which indicates the distributional inequity of the project where vulnerable people (low income households) endure the negative impacts and positive impacts are endured by homeowners and investors. The primary data indicate that the latter are also the people who endure the positive economic benefits from the project (direct and indirect employment)
Way of life – Mobility: increased travel time, decreased safety, increased frustration and annoyance	4am-8pm and 4pm-7pm during life of mine	Moderate, almost certain, high	None*	
Health and well-being – Interruptions and stress due to pressures and requirements of planning process	Original DA and subsequent modification	Moderate, almost certain, high	MACH internal engagement plan	Particularly affected are neighbouring landholders and people from the surrounding villages and communities that are enduring the adverse environmental and social impacts.
Health and well-being – Decrease in health and well-being, including identity and connection to country	Since construction began on the site	Significant, likely, extreme	Consultation and involvement of community in Aboriginal Heritage Management Plan and Water Management Plan	This impact is specifically identified for the Aboriginal community. The data suggest that non-Aboriginal residents in the area also have a deep connection to the landscape with their identity and heritage tied to the rural settle landscape in and around Muswellbrook. Regardless of the rehabilitation strategies and final land design, the rupture to the landscape and, for the Aboriginal community, the destruction of songlines and loss of lore held in the soil, will be permanent. This is recognised in the SIA and Appendix H: There would be negative impacts through the permanent change to the land due to mining and construction of the overburden and “... <i>the destruction of songlines, loss of lore that is held in the soil, the trees and the plants of the area, loss of identity due to inability to connect to</i>

				<p><i>significant tracts of land and understand and practice culture” (SIA, pg. 33).</i></p> <p>It is stated that the opportunity to practice Aboriginal culture and land management activities at the Mount Pleasant Operation are positive impacts arising from the project, as is the ACDF, which funds Aboriginal organisations and initiatives. Whilst there is no doubt that these activities and the ACDF are positive initiatives, these are <u>not</u> mitigating the significant and extreme impact that the Mt Pleasant operation has culture through its environmental footprint. It is essential not to imply, as is done in the SIA, that consultation with and involvement of the Aboriginal community mitigates the impact the project is having on Aboriginal culture and the ruptures that it is creating for an already dispossessed cohort of the population.</p>
<p>Health and well-being – Amenity (dust, noise, blasting, lights): Decrease in health and wellbeing (stress, solastalgia, eritalgia, place attachment etc.)</p>	<p>Since construction began on site</p>	<p>Moderate, likely, high</p>	<p>Environmental management plans</p>	<p>The mitigation strategies may keep address some of the issues around air pollution, noise, blasting and lights. They may ensure that the levels of pollution and impact on amenity are within industry levels. The data do, however, prove that the limits do get exceeded and cause disruption and distress for the mine’s neighbours and the broader population of Muswellbrook and Aberdeen (SIA Appendix N). The following quotes illustrate the lived experience of these impacts despite the mitigation strategies in place:</p> <p><i>“The most significant impact from the current Mount Pleasant Operation is dust. It is good that Mount Pleasant has to shut down during certain environmental conditions and don’t have to call up to complain. But the dust impacts still occur and is impacting on ... health and everyday life” (SIA Appendix N, pg. 66).</i></p> <p><i>“Dust, noise, blasting vibrations, fumes and the continual inconvenience of large numbers of vehicles and machinery entering and leaving the mine site. Every day we are aware of the dust problem and its getting worse” (SIA Appendix N, pg. 66)</i></p> <p><i>“The noise impacts are managed a bit differently by MACH Energy [compared to dust]. People have to make a complaint/s about the noise before anything is done. MACH Energy isn’t as proactive with noise as they are about dust. Because MACH Energy has to shut down to manage dust impacts, it means they have to work harder to catch up when they are allowed to start mining again and this can produce more noise. Because there is less ambient noise at night, the noise impacts are worse. The machinery seems to start up at about 10:30pm, maybe this is</i></p>

				<i>when they think everyone is asleep, but really this is when some people are trying to get to sleep. This is when we get really frustrated because it's the end of our day and we are trying to get to sleep"</i> (SIA, Appendix N, pg. 67)
Health and well-being – Landscape change: Decrease in health and wellbeing (stress, solastalgia and eritalgia)	Since construction began on site	Moderate, likely, high	Visual impact management plan	<p>The mitigation strategies may help manage some of the material impacts, but they also create new impacts in and of themselves. Their success in mitigating the negative social impacts resulting from environmental change and the reduced quality of environment appear negligible. The following quotes from the SIA illustrate the failures to manage and mitigate these impacts:</p> <p><i>"For those of us who live here, the rapid development of Mt Pleasant has been shocking and heartbreaking. Its proximity to town makes for a high visual impact (eyesore) on the landscape, from all approaches to Muswellbrook and it is a real loss for those who live, looking West across what were restful floodplains, horse paddocks and rolling hills and is now mega scale industrial mining complex and attendant filthy skies"</i> (SIA Appendix H, pg. 12).</p> <p><i>"I have looked out of my window to the west and seen the same hills all my life. when we get a storm from the west, I can tell what its going to do by where it comes over the hills. I won't be able to see those hills anymore, the overburden will block that view. MACH can make it look as natural as they like but it's not natural because it wasn't there before"</i> (SIA Appendix H, pg. 43).</p>
Health and well-being – Traffic: Perceived increased risk of accidents due to increased traffic and mine workers fatigue	4am-8pm and 4pm-7pm during life of mine	Moderate, likely, high	HR policies and processes, OH&S requirements and Local Labour Commitment	
Access – Medical services: Increased demand on local medical services (including mental health services)	Life of mine	Major, likely, high	None*	The impact on medical services is cumulative with other mining in the Upper Hunter region and it is significant considering the significant consequence and high likelihood of other social impacts that are linked to reduced physical and mental health (see above).

Access – Education: Increased demand for educational services	Life of mine	Major, likely, high	Community contributions (donations and sponsorships)	Whilst it is recognised that MACH Energy has contributed positively to community initiatives through community contributions, this mitigation strategy does not address the issue of increased demands on educational services unless the funds go directly to support infrastructure at local school and funding of additional service providers in the region.
Access – Rural Fire Services: Decrease in membership and participation in Rural Fire Services because landowners and families relocating out of the district due to land acquisition	Life of mine	Moderate, likely, high	*None	The implication of relocation of landowners and their families due to acquisition is not just a matter that impacts Access and the Rural Fire Services, specifically. The acquisition of land at and around the Mount Pleasant operation has displaced whole communities, leaving behind ruptured communities that have lost their social fabric and cohesion. The landholders who remain are left with stranded assets and for the residents who do not have acquisition rights are finding it difficult to sell and need to endure the loss of community and environmental impacts caused by the mine (cf. Askland 2018). The loss of community and the subsequent decrease of membership and participation in key organisations such as RFS poses the community at greater risk in cases of disasters, including bush fires.
Surroundings – Amenity (dust/air pollution, noise, blasting, light): Decreased level of amenity and decreased quality of the living environment in which people live, work and play	Since construction began on site	Moderate, almost certain, high	Visual Impact Management Plan, Air Quality and Greenhouse Gas Management Plan, Blast Management Plan, Noise Management Plan	See comment: Health and well-being – Amenity (dust, noise, blasting, lights)
Surroundings – Visual impacts: Decreased visual amenity	Both temporary and permanent effects	Moderate, almost certain, high	Rehabilitation of overburden using geofluid design	This impact is closely linked with the health and well-being – Landscape change (above). This impact is not only about the decreased visual amenity; it is also about the changes that the mine causing in the landscape and the topography. Whilst the rehabilitation may, over time, reduce the visible scar, the changes that the mine operation and rehabilitation design causes to loved landscapes may be source of place based distress, including solastalgia (Albrecht 2005). There is little trust in

				<p>the rehabilitation strategies within the non-mining affiliated parts of the community. This is illustrated by the following quotes from the SIA:</p> <p><i>“The worst part about mining is, it annihilates everything in its path, the houses, the productive land, the people and what does it leave behind? The mining companies say they are or are going to rehabilitate but how can they? They have taken so much out of the land and moved it around so much, it can never go back. You can see that from the attempts to rehabilitate the overburden. There just isn’t enough top soil to cover it – it’s simple mathematics”</i> (SIA Appendix N, pg. 71).</p> <p><i>“We’ve been watching the overburden being built. We no longer have a view of the natural landscape but rather look directly into the overburden. We also see the dust and blasts. We can see the dust come off the overburden or out of the mine and settle on the surrounding areas. The rural landscape has changed dramatically”</i> (SIA Appendix N, pg. 71).</p> <p><i>“It is depressing and disempowering to see this destruction of landscape taking place upwind of town”</i> (SIA Appendix N, pg. 38).</p>
<p>Way of life – Socio-economic impacts: Time and money spent and opportunities lost due to management of the impacts of the Mount Pleasant operation</p>	<p>Life of the mine</p>	<p>Moderate, likely, high</p>	<p>*None</p>	<p>The qualitative data presented in the SIA Appendices I, H and N imply a level of fatigue within the community from having to deal with the impacts of the mine, which is time consuming. This is something I have observed in my research with other mining affected communities as well (e.g. Askland 2018, Askland and Bunn 2018), and it is linked to experiences of disempowerment, depression and stress. It builds into the greater lived experience of rupture and displacement emerging in the context of mining. Quotes from the SIA that illustrate the complexity of this impact are:</p> <p><i>“There seems to be more dust now, despite the rain. The house and our cars are getting dirtier. Our cars are getting dirt on them even when the garage door is closed. We need to wipe the wire on the clothes line before we can hang the washing out, which we have never had to do before. Noise has been ok, although over the past 6 weeks it seems to be getting worse. We just put the pillow over our heads and try to get back to sleep, there’s no point in complaining”</i> (SIA, Appendix N, pg. 67).</p> <p><i>“We don’t bother about complaining because it’s not worth it. If there is a problem, we just tend to fix it ourselves e.g. fixing broken boundary fences”</i> (SIA, Appendix N, pg. 77)</p>

<p>Way of life – Socio-economic impacts: increased housekeeping and cleaning workload due to deposited dust</p>	<p>Life of mine</p>	<p>Moderate, likely, high</p>	<p>Air Quality and Greenhouse Gas Management Plan</p>	<p>Whilst the mitigation strategies may reduce the dust somewhat the management of dust is a significant adverse circumstance that is endured by local residents, particularly near neighbours. The need to keep up with cleaning the dust is impacting both everyday life and businesses, as indicated by the following quotes:</p> <p><i>“Extra cleaning of the dairy and equipment to keep it up to health standards. Stainless steel in the dairy is cleaned weekly instead of quarterly. These are all added costs to the business. Management practices are being impacted by mine operations – such as costs of moving cattle, cost of cleaning infrastructure and equipment for health and hygiene”</i> (SIA, Appendix N, p. 78).</p> <p><i>“Having to clean away the increasing level of dust each day is annoying and frustrating, and after so many years it is starting to take its toll. Elisabeth needs help to stay on top of the cleaning, it is getting to be too much for one person to clean each day. Vehicles left out at night are now covered in a fine dust layer each morning”</i> (SIA, Appendix N, p. 78).</p> <p><i>“The dust in the house has greatly increased and turned black in colour so that cleaning requirements have increased and kitchen benches must be thoroughly cleaned before any use even if cleaned previously that day”</i> (SIA, Appendix N, p. 78).</p>
<p>Way of life – Socio-economic impacts: local/regional competition for skilled workers</p>	<p>Until the role can be filled</p>	<p>Moderate, almost certain, high</p>	<p>*None</p>	<p>The SIA identifies the higher wages of workers in mining companies have led to loss of workers in other industries that cannot offer the same level of high wages and a skills shortage in the region. This is a cumulative impact of the mining industry in the Upper Hunter, of which Mount Pleasant plays a part. A further concern for non-mining industries is the ageing demographic of skilled workers in the region and the potential for further loss and competition between industries. The SIA identifies the duration of this impact as ‘until the role can be filled’. Whilst this is correct about the individual jobs, the overall competition for skilled workers will be ongoing for the life of the mine.</p>
<p>Culture – Reduction of cultural identity, connection to country and self-esteem</p>	<p>Since construction began</p>	<p>Significant, likely, extreme</p>	<p>Involvement of Aboriginal community in land management practices and Aboriginal</p>	<p>See comment: Health and well-being – Decrease in health and well-being, including identity and connection to country.</p> <p>The implication of this impact is significant and in relation to Aboriginal communities, specifically, the cultural trauma of dispossession and the ongoing legacies of colonialism must be taken into account. The issue that this impact speaks to relates to a distinct notion of place-based distress and displacement, which involves ‘having one’s sense of</p>

			Heritage Management Plan	purposeful being and purposive connection to place, time, and social worlds – that is, one’s teleology – ruptured’ (Ramsay and Askland 2020: 2). Place attachment, for Indigenous and non-indigenous populations, is linked to notions of ontological security (Askland and Bunn 2018; Farbotko 2019) and ruptures to the environment due to changes in the landscape can lead to “deep psychological wounds” that rupture identity because the Country is understood as an extension of self (Verlie 2021: 29; Askland et al. 2022: 8).
Culture – Landowners taking up voluntary acquisition and moving away/purchase of rural properties for the Project: loss of agricultural culture/community.	Permanent	Moderate, almost certain, high	Offering for landholders to remain on properties and lease back from MACH. Retaining the original land use where practical.	The mitigation strategies put in place here completely disregards the views of community and the key issue at stake with this impact. Firstly, to offer landholders to remain on their properties and lease back does not recognise the reasons for wanting to sell in the first place – which will most likely be due to the other social impacts of the Project, which would remain a key concern for landholders even after a sale (depending on if they retain their right to complain after a sale, it may in fact, enhance the adverse impacts). To retain the original land use where practicable is valuable in terms of keeping the prior land use and maintaining agricultural productivity in the area but it does not mitigate the impact related to loss of culture, which is about more than simply agricultural productivity and speak to a particular approach to land and land use, community and living. The following quote from the SIA illustrates: <i>“The old farming communities, including Kayuga have been wiped out. The land has been bought, the homes, including Berrywood, mostly demolished and the people dispersed. The history was recorded and then so much of previous land use and lifestyle was destroyed. The local culture belonged to the people who led those lives”</i> (SIA, Appendix N, pg. 94). <i>“Kayuga village is basically gone, MACH owns most of it. It used to be a thriving village, known for its dances at the Kayuga Hall. But they don’t happen anymore. John grew up on the farm and he had friends at Kayuga, our girls used to ride their horses with friends at Kayuga”</i> (SIA, Appendix N, pg. 94).
Culture – Changing demographic from agriculture to mining: increased community tensions / change in community identification and	Life of mine	Moderate, almost certain / likely, high / extreme	*None / community contributions	This issue speaks to the topic of displacement discussed above. The impact of different perspectives and beliefs on the coal industry is linked with the mitigation strategy of community contributions. It should be noted that this type of mitigation strategy may help, in some instances, buy a ‘social licence’ from sections of the community but it can also increase the tensions that are experienced (cf. Askland et al. 2016).

connection, loss of social network and capital				
Livelihoods – Impact on personal and property rights: feelings of powerlessness, stress, uncertainty and self-image due to perceived sterilisation of property market and inability to sell	Life of mine	Moderate, almost certain, high	*None	<p>This impact is linked to the issue of acquisition and ruptures of communities – See Comment: Landowners taking up voluntary acquisition... . There is a distinct risk for the landholders who fall outside of the acquisition zone but who are close enough to the mine to endure the adverse social and environmental impacts to be left with so-called ‘stranded assets’. As noted by one of the respondents quoted in the SIA:</p> <p><i>“Where a community has been decimated by mining there are usually people “left behind’. Those who are on the wrong side of the arbitrary lines marking zones of affectation and acquisition. It is these people who are left to experience the impacts of mining and unable to sell at a price that would buy them a comparable property in a now more desirable location”</i> (SIA, Appendix H, pg. 21).</p>
Decision making system – Feeling unable to affect the decision if the Project goes ahead or not, leading to uncertainty and powerlessness	Original Development Consent DA 92/97 and subsequent modifications	Moderate, almost certain, high	Communication about the Mount Pleasant Operation and proposed modifications	<p>The data presented in the SIA indicate a high level of stress and uncertainty associated with the planning process, with the uncertainty about how the current operation will change in the future articulated by many respondents as a major concern. There is little trust amongst the respondents that are not employed at Mount Pleasant or affiliated with the mining industry, and the mitigation strategy of community engagement and communication do not ease the stress and uncertainty people endure. Rather, based on their experience of dealing with mining companies, including Mount Pleasant, communication about future modifications heighten a sense of uneasiness. People speak about difficulties in making plans and invest in their future because of the uncertainty that the mines bring. An example of this is the fact that Mount Pleasant has in the course of a few years gone from the approved modification of a few years to now a proposed optimisation for 22 years.</p> <p>The uncertainty that people experience due to the current Mount Pleasant Operation is captured in the following quotes:</p> <p><i>“We are not against mining, we just want certainty to plan for our future. We have missed out on opportunities because of this uncertainty. It feels like our hands are tied”</i> (SIA, Appendix H, pg. 40).</p> <p><i>“At the moment, the biggest thing is the uncertainty. I don’t know what the impacts are going to be and how bad they are going to be, it worries me”</i> (SIA, Appendix H, pg. 42).</p>

<p>Decision making system – Frustration of continuing dust, noise, blasting and lighting impacts and the need to lodge a complaint/s with non perceived change in impact.</p>	<p>Life of mine</p>	<p>Moderate, likely, high</p>	<p>Complaints process (including following up with each complainant) and complying with Development Consent DA 92/97 conditions</p>	<p>The data indicate that the mitigation strategy is unsuccessful and, despite the processes in place to deal with complaints, people feel frustrated and disempowered, with the result of not complaining.</p> <p>See comment: Way of life – Socio-economic impacts: Time and money ...</p>
<p>Community – Equity impacts: distributional impacts, change in social networks, community cohesion and reinforcement of social differentiation and inequity</p>	<p>Life of mine</p>	<p>Moderate, likely, high</p>	<p>Visual impact Management Plan, Air Quality and Greenhouse Gas Management Plan, Blast Management Plan, Noise Management Plan</p>	<p>The distribution of adverse impacts and benefits of the current operation at Mount Pleasant has a clear element of inequity, and the positive and negative impacts of the mine are distributed with clear ‘winners’ and ‘losers’: those who work for the mine or associated industries experience the positive impacts associated with work, employment and housing, whilst those who live in the close vicinity of the group or come from low income households or Aboriginal people endure the negative impacts. This inequitable distribution of the social and economic costs of the project underpin community tension and conflict. The mitigation strategies listed for this impact do not address these impacts and do not ensure a fairer distribution of benefits and costs. The operation enhances economic disparity, as well as gender inequity.</p> <p>The Project also carries an intergenerational inequity element, which the SIA does not address. This links to the issue of climate change and biodiversity loss, as well as loss of heritage and culture, which may deprive future generations in the region.</p>

30. All the adverse impacts endured by the current operation are identified in the SIA Appendix Q and predicted to continue should the Project proceed.

31. Table 2 summarises the positive and negative social impacts predicted should the Project proceed (adapted from the SIA Appendix Q). The table highlights: the positive impacts with major or significant, likely or almost certain high or extreme social risk/opportunity rating (**green**); the negative positive impacts with major or significant, likely or almost certain high or extreme social risk/opportunity rating (**red**); contentious/incorrect mapping of impact/opportunity/risk with explanation in **red text** (**grey**); and additional concerns in **red text**.

Table 2: Summary of potential positive and negative impacts if the Project proceeds

- Positive impact with social risk/opportunity ratings: Major or Significant / Likely or Almost Certain / High or Extreme
- Negative impact with social risk/opportunity ratings: Major or Significant / Likely or Almost Certain / High or Extreme
- Contentious/incorrect mapping of impact/opportunity/risk

Positive			Negative		
Impact category	Impact	Affected parties	Impact category	Impact	Affected parties
Way of life	Employment Direct employment, continued employment pathways through Gundi program, indirect employment	People employed and their families, local businesses and employees	Way of life	Housing Impacts on availability and affordability of housing	Low income households in Muswellbrook, Upper Hunter and Singleton LGAs
	Housing Continued demand for housing allowing for stability of house and land value	Homeowners and investors		Mobility Increase in travel times and feelings of frustration and annoyance	Other road users, particularly residents of Muswellbrook and Singleton and emergency services, near neighbours
	Recreation Continued funding from ACDF or a similar Aboriginal community development organisation	Residents and visitors of the Hunter Region		Traffic noise Continued feelings of frustration and annoyance and noise impacts from vehicles	Near neighbours who share access
				Recreation Continued impacts on the patronage on the Muswellbrook	Trainers, owners, members, visitors

				Race Club due to dust and visual impacts	
Health and wellbeing	Employment Health and wellbeing increased due to being employed	MACH workforce and suppliers and their families.	Health and wellbeing	Disruptions Continued negative effects on health due to the stress of participating in the environmental approval process in the hope of influencing the decision and what conditions may be put on them	Neighbouring landholders and people from the surrounding villages and communities
				Place-attachment Permanent changes to the landscape.	Aboriginal community with connections to the land and waters being impacted
				Amenity Decrease in health and wellbeing due to environmental impacts (air quality, dust, noise, blastings, light)	Residents who experience amenity impacts
				Place-attachment Permanent changes to the landscape	Near neighbours and residents of surrounding rural communities and Muswellbrook
				Employment conditions Continued negative impacts due to shift work	MACH workforce and families
				Traffic hazards Perceived increased risk of accidents due to mine workers being fatigued	Other road users, emergency services
				Personal and property rights	Property owners who are impacted by Mount Pleasant

				<p>Sterilisation of property market and stranded assets leading to feelings of powerlessness, stress, uncertainty and self-image</p>	<p>but who have not been determined to have acquisition rights</p> <p>Additional affected party: Landholders who have acquisition rights but who do not want to leave the area or sell their property due to long-standing connections to the property and region (e.g. generational farms) or who have acquisition rights but endure negative experience in the process of negotiation and settlement.</p>
				<p>Fears and aspirations</p> <p>Continued fear of losing home and livelihood</p>	<p>Properties downstream of the mine on the Sandy Creek catchment</p> <p>Additional affected party: rural villages and landholders nearby the mine, particularly farmers</p>
				<p>Fears and aspirations</p> <p>Fear that the BMA properties will change from being working agricultural properties to being 'locked up'</p> <p>Note: incorrect mapping in SIA: this impact was marked as positive but reading the description, I believe this is a mistake and this should be</p>	<p>BMA property and neighbouring owners and managers, and the Merriwa and Cassilis district</p> <p>Additional affected party: the greater public due to concern about post-mining land use and climate change</p>

				classified as negative	
Accessibility	Medical services Continued and possible increase demand on local services Contested due to increased pressure on health system	Mine workforce, their families and neighbouring landowners and their families in MSC LGA	Accessibility	Medical services Continued and possible increased demand on local medical services	Mine workforce, their families and neighbouring landowners and their families in MSC LGA
	Education Continued and possible increased demand on local educational services	Childcare and education service providers		Education Continued and possible increased demand on local educational services	Childcare and education service providers Additional affected party not identified in SIA: families and children in MSC LGA
	Community participation Continued and possible increase in participation and support for local community groups Contested because of the identification of negative community impacts resulting from 12-hour shifts (below)	Community groups and organisations		Rural Fire Services (RFS) Decrease in membership and participation in RFS	RFS and people reliant on RFS services
	MACH community contribution Continued funding to provide services and facilities	Organisations who receive donations and the people they support		Emergency services Continued and possible increase in demand on emergency service services	Emergency service providers Additional affected party not identified in SIA: residents of MLC LGA
	VPA Continued funding to MSC through VPA	Residents living in the MSC LGA			
	Biodiversity Offset Small increase in number of people local	People living and working in the BMA properties and the services they access			

	services and facilities and supporting local organisation				
Surroundings	Biodiversity Offset Achieved biodiversity outcomes Contested as this would not be a requirement without the mine and loss of biodiversity not identified as social impact	On behalf of the Australian population	Surroundings	Amenity Continued and potential further decrease in level of amenity and decreased quality of living environment	Near neighbours and residents of surrounding rural communities and Muswellbrook
				Visual impacts Decrease in visual amenity from the western side of Muswellbrook	People who live, work, play or travel through the western side of Muswellbrook
Livelihoods	Socio-economic - Employment Opportunities for employment and comparative higher wages resulting in high standard of living and increased financial choice	Current employees and contractors	Livelihoods	Socio-economic - Impact mgmt Lost time and opportunities due to having to manage impacts of mine	Near neighbours
	Socio-economic - Local economy Continued support for local business from workers and their families buying locally Contested based on conflicting data in SIA and no scaling of social locality here to recognise difference between MLC LGA and other areas	Local businesses in Muswellbrook, Upper Hunter and Singleton LGAs		Socio-economic - Dust Continued housekeeping and cleaning workload due to deposited dust	Residents who experience dust impacts
	Socio-economic - Local economy Continued local spend by Mount Pleasant Operations	Businesses in Muswellbrook, Upper Hunter and Singleton LGAs		Loss of skilled workers Continued competition for skilled workers in the local/regional area	Employers who have lost workers to the Mount Pleasant Operation Additional affected party: local residents

					needing services by affected employers
	Biodiversity Offset Contribution to local economy via BMA properties and MACH Contested as this would not be a requirement without the mine and loss of biodiversity not identified as social impact	Businesses in Merriwa and Cassilis			
Culture	Opportunities to connect Continued positive impact on cultural identity and self-esteem Contested because of problematic causal link to management strategy (see discussion above)	Aboriginal community with connections to the land and waters being impacted	Culture	Loss of culture Continued negative impact on cultural identity, connection to country and self-esteem	Aboriginal community with connections to the land and waters being impacted
	ADCF Continued funding for programs to promote cultural, educational, economic and health outcomes	Aboriginal community		Loss of agricultural culture Continued displacement of agricultural community due mine acquisition	Landowners taking up voluntary acquisition and relocating out of the district Additional affected party: Landholders who remain in rural villages and people with connections to the displaced communities
	Biodiversity Offset Maintaining agricultural culture Contested as maintaining agricultural productivity does not equate to maintaining agricultural culture	People living and working on the BMA properties and the services they access			

Community	<p>Biodiversity Offset</p> <p>Enhancement of the community composition, cohesion and character of the local district</p> <p>Contested as biodiversity offsets would not be a requirement without the mine and loss of biodiversity not identified as social impact</p>	People living and working on the BMA properties and the services they access	Community	<p>Reduced social cohesion</p> <p>Continued loss of social networks, community and reduced social cohesion due to the impact of the decision-making process for voluntary and compulsory acquisition, reinforced social differentiation and inequality</p>	Properties identified as having 'acquisition rights' and their near neighbours and surrounding rural communities
				<p>Loss of community and displacement</p> <p>Continued loss of rural communities due to mine acquisition</p>	Property owners, their families and friends, and remaining landholders/community
				<p>Changing demographic and community tension</p> <p>Continued change in demographic from agriculture to mining resulting in community tension and change in the identity of the town from agricultural or rural to mining town</p>	Residents of Muswellbrook, Aberdeen, Scone
				<p>Reduced social cohesion due to temporary workforce</p> <p>Change in community identification and connection, and loss of social networks and social capital due to presence of temporary</p>	Existing residents of Muswellbrook and other villages and towns

				resident mine workers	
				<p>Community tension and division</p> <p>Loss of community cohesion and increased community division and tension because of different perspectives and beliefs on the coal industry and the need to act on climate change</p>	<p>People who support mining or oppose mining</p> <p>Additional affected party: The communities of Muswellbrook, Singleton, Aberdeen and Scone</p>
				<p>Community cohesion</p> <p>Continued negative impacts on social networks, community identification, connection and cohesion due to workforce working 12-hour shifts</p>	<p>Volunteer based community organisations and the people they provide services to</p> <p>Additional affected party: due to the significant dominance of male workers, women are likely to adversely impacted as they may be required to contribute the volunteer work basis lost</p>
				<p>Family structure</p> <p>Alternation of mine workers' family structure because workers live away from their family while working</p>	<p>New employees who have not worked a roster/12-hour shift before and their families</p> <p>Additional affected party: impact is not only for new employees; this is also a continued impact for families of mine workers. Women may be adversely impacted by increased caring</p>

					responsibilities and potential.
				Equity impacts Continuation of distributional impacts resulting in changes in social network, community cohesion and reinforcement of social differentiation and inequity	Near neighbours, surrounding rural communities and residents of Muswellbrook and other villages and towns.
				Intergen equity Intergenerational impacts due to changes to the landscape Additional impact cause/matter: climate change	Current and future generations
				Gender equity Increased workload for partner 'at home' with family responsibilities Additional impact cause/matter: loss of work, recreational opportunities, career progression	Partner of mine worker 'at home' – predominantly women
Decision making system			Decision making system	Powerlessness Continued frustration of continuing dust, noise, blasting and lighting impacts and the need to lodge complaint/s with no perceived change in impacts, resulting in people stop complaining	Near neighbours, surrounding rural communities and residents of Muswellbrook

32. As evidenced by Table 2, the negative social impacts of the Project far outweigh the positive impacts both in quantity and in their rating at the higher scale of the social risk/opportunity rating. Table 2 only includes the higher ratings as these are evaluated in the SIA. Based on my knowledge of the ongoing stress and tension endured within mining-communities (e.g. Askland et al. 2016; Askland 2018, 2020; Askland and Bunn 2018; Ramsay and Askland 2020), and the anticipation that many of these stressors would increase as the landscape continues to be dominated by mining and the consequences of climate change intensifies (Askland et al. 2022), I contend that many of these impacts—particularly those related to health and wellbeing, community and surroundings—have been underestimated and should be ranked higher.

33. Many of the adverse circumstances that have not been highlighted above based on a major or significant social risk/opportunity rating have, nonetheless, gravity score of G2, vulnerability score of V1, remediate score of R1 or R2. As explained in the SIA Appendix S (pg. 2-3), these scores mean:

- | | |
|---------------------------|--|
| G2 (Gravity) | Infringement of access to: <ul style="list-style-type: none"> • Basic life necessities (including education, livelihoods etc.) and/or • Cultural, economic, natural, or social infrastructure/assets that have been identified as highly valued by identified groups or subject matter experts in the scoping and assessment, including housing and/or • Ecosystem services identified as priority to livelihoods, health, safety or culture in scoping and assessment steps of the assessment process. |
| V1 (Vulnerability) | Will impact vulnerable people (as a group) or the entire community if the community is vulnerable to this impact because of recent trends or events (e.g. conflict, natural disasters, ecosystem services, cultural heritage). |
| V2 (Vulnerability) | Will impact other people who are not necessarily considered vulnerable in the given context. |
| R1 (Remediation) | Difficult to remediate. |
| R2 (Remediation) | Moderate to remediate. |

34. To be scored at ‘significant’ or ‘major’ in the consequence category, an impact either has to be regarded as G1 (impact will cause death or adverse health impacts including long-term illness or disability) or have a particular combination across the gravity, extent, vulnerability and remediation scores (see SIA Appendix S, pg. 2-3). However, impacts categories with G2, V1 or V2 and R1 or R2 should nonetheless be recognised as severe. The adverse impacts that fall within this bracket have been summarised in Table 3:

Table 3: Impacts scored with G2 and V1 or V2 and R1 or R2

Negative impact	Score
Way of life – Housing: Impacts on availability and affordability of housing	G2, V1, R2
Health and wellbeing – Place attachment: Permanent changes to the landscape – Aboriginal community	G2, V1, R2
Health and wellbeing – Place attachment: Permanent changes to the landscape – Near neighbours and residents of surrounding rural communities	G2, V2, R1
Health and wellbeing – Fears and aspirations: Continued fear of loosing home and livelihood	G2, V2, R2
Access – Education: Continued and possible increased demand on local education services	G2, V2, R2
Surroundings – Amenity: Continued and potential further decrease in level of amenity and decreased quality of living environment	G2, V2, R2
Culture – Loss of culture: Continued negative impact on cultural identity, connection to country and self-esteem	G2, V1, R2
Culture – Loss of agricultural culture: Continued displacement of agricultural community due mine acquisition	G2, V2, R1
Community – Reduced social cohesion: Continued loss of social networks, community and reduced social cohesion due to the impact of the decision-making process for voluntary and compulsory acquisition, reinforced social differentiation and inequality	G2, V2, R1
Community – Loss of community and displacement: Continued loss of rural communities due to mine acquisition	G2, V2, R1
Community – Community tension and division: Loss of community cohesion and increased community division and tension because of different perspectives and beliefs on the coal industry and the need to act on climate change	G2, V2, R1
Community – Equity impacts: Continuation of distributional impacts resulting in changes in social network, community cohesion and reinforcement of social differentiation and inequity	G2, V2, R1
Community – Intergenerational equity: Intergenerational impacts due to changes to the landscape	G2, V2, R1

35. Based on my assessment (Table 1, above) of the failures of the existing mitigation strategies to deal with some of the social impacts, particularly as these relate to the environmental impacts and landscape changes, the lack of trust in the mine’s rehabilitation plans, the planned – permanent – final void, and the contestation about rehabilitated mine land as ‘natural’ (e.g Askland 2020), I disagree with the remediation scores given for a number of negative impacts. Furthermore, based on my long-term research on development-induced displacement and resettlement (e.g. Askland 2018; Askland and Bunn 2018; Ramsay and Askland 2020; Askland et al. 2022), I disagree with the gravity ratings for some of the negative impacts. The contested negative impact ratings are summarised in Table 4:

Table 4: Contested and revised consequence categories

Negative impact	SIA Score	Revised score
Health and wellbeing – Amenity: Decrease in health and wellbeing due to environmental impacts	G2, V2, R3	G2, V2, R2
Health and wellbeing – Personal and property rights: Sterilisation of property market and stranded assets leading to feelings of powerlessness, stress, uncertainty and self-image	G3 , V2, R1	G2, V2, R1
Accessibility – Rural Fire Services: Decrease in membership and participation in RFS	G3 , V2, R2	G2, V2, R2
Surroundings – Visual impacts: Decrease in visual amenity from the western side of Muswellbrook	G3 , V2, R1	G2, V2, R1
Culture – Loss of culture: Continued negative impact on cultural identity, connection to country and self-esteem	G2, V1, R2	G2, V1, R1
Community – Changing demographic and community tension: Continued change in demographic from agriculture to mining resulting in community tension and change in the identity of the town from agricultural or rural to mining town	G3 , V2, R1	G2, V2, R1
Community – Reduced social cohesion due to temporary workforce: Change in community identification and connection, and loss of social networks and social capital due to presence of temporary resident mine workers	G3 , V2, R1	G2, V2, R1

36. It is particularly important to note the **severe negative impacts on health and wellbeing, culture and community**, which are closely interconnected to the **negative environmental impacts** (including dust, noise and visual impacts) that **reduce the quality of the local environment, surroundings and landscape**. These impacts are interconnected, and their likelihood, severity, significance and consequence will follow a parallel degradation. If the Project is approved, the existing adverse impacts will continue or increase, with the individual impacts building into a severe cumulative social impact that will be difficult to mitigate and/or manage.

37. In regard to this, it is important to note the significant difference between risks and benefits on these categories. For example, as Table 2 shows, there are 10 predicted negative impacts related to community but only 1 positive impact. I do not agree with the SIA's prediction of the positive impact on community as this relates to biodiversity offset, which suggests a counter-intuitive prediction that the community will benefit from restoring the landscape destroyed by the mines; a landscape that would not require restoration if the Project is not approved.

38. Similarly, health and wellbeing has 9 predicted negative impacts and only 1 positive. The positive impact relates to employment and is, as such, limited to the MACH Energy workforce and their

suppliers, indicating **a significant issue related to distributional equity and proves that the Project will lead to growing local inequity.**

39. With the exception of some trickle-down benefits that may come from the VPA and the continued funding of ADCF, **only MACH Energy, MACH Energy workforce and their families, suppliers for MACH Energy and their families, and some homeowners and investors, will benefit from the Project** whilst the existing residents of Muswellbrook and, importantly, more vulnerable sections of the population, farmers, people in low-income households, and Aboriginal people in the mine's social locality, will carry the risks and endure the adverse impacts. **The disproportionate distribution of benefits and adverse impacts are not discussed at any length in the SIA, yet this is a significant concern that represents a highly likely social impact with potentially extreme consequences for local community.**
40. The SIA identifies a number of the social impacts predicted as cumulative. The significant adverse consequences of the predicted negative impacts associated with the Project is heightened in light of this. It is of particular importance to recognise the cumulative adverse impacts of the thermal coal mines in the region and, specifically, surrounding Muswellbrook as these relates to environmental impacts, including dust/air pollution, noise, visual impacts and light pollution.
41. It is a well-established recognition within SIA literature that environmental, social and health impacts are closely interconnected and that this interconnectedness warrants an integrated assessment (Vanclay 2015; NSW Government 2021). Although the SIA captures amenity features, including dust, noise, visual impacts and lighting, the Project Summaries of the EIA and the Department's Assessment Report separates the social and environmental factors and, thus, contradicts what is recognised as good EIS practice and appropriate assessment of social impacts.
42. The importance of recognising the **lived experience of environmental impacts as social impacts** is established in the 2019 Land and Environment Court Judgment of the *Gloucester Resources Limited v Minister of Planning*. In his judgment, Preston CJ deems that environmental impacts related to visual impacts and amenity (including noise and dust) constitute social impacts even if the technical assessment of such impacts comply with the relevant development standards. For example, in relation to the cumulative air quality levels predicted for the Rocky Hill Mine, Preston CJ (2019: 269, my emphasis) writes:

The negative social impacts caused by residents' concerns about the project related air quality impacts, including the perceived threat to their health and the health of their families, are not impacts that are the subject of the cumulative air quality level development standard in cl 12AB(4) of the Mining SEPP. *That development standard does not prevent a consent authority*

from refusing consent on grounds relating to, or imposing conditions to regulate, project related air quality impacts that are not the subject of the development standard or social impacts resulting from project-related air quality impacts.

43. The SIA Appendix Q (Section 3.2) presents a **provisional Social Impact Management Plan (SIMP)**. The SIMP is a critical instrument for addressing, mitigating and managing adverse social impacts. Once the mine is approved, the SIMP is essential for enhancing and refining mitigation, as well as monitoring and managing social impacts. At this stage of the planning process the primary purpose of a provisional SIMP to (a) indicate how to manage social impacts and the effectiveness of the mitigation strategies in improving the management of social issues, and (b) informing the go/no go decision of the Project.
44. The provisional SIMP for the Project adopts, at large, the same mitigation strategies as the current approved operation at Mount Pleasant. As shown above (Table 1), these mitigation strategies are problematic and have only negligible effects in reducing the adverse impacts endured.
45. The key strategies for mitigation adopted in the SIMP are linked to MACH Energy's:
- Community and Stakeholder Engagement Strategy;
 - Workforce Management Strategy;
 - Housing and Accommodation Strategy;
 - Local Business Procurement Strategy; and,
 - Community Health and Wellbeing Strategy.

These strategies at large propose consultation as mitigation. The failures of the existing operation in adequately managing and reducing the adverse negative impacts and achieving better outcomes for the affected communities indicate that the proposed mitigation and management strategies for the Project are ineffective. In terms of the mitigation strategies proposed to deal with visual impacts, including the Fines Emplacement Area Raises (EIS, Section 3 Project Description, pg. 3) may, rather than mitigating impacts, result in adverse negative impacts in and of themselves. For example, with the suggestion to raise the Fines Emplacement Area height of approximately 299 m ADH, this will change the topography of the landscape and the suggestion by MACH Energy that this is 'natural' is contested by residents who have a long-standing connection to the region.

46. Key issues regarding the ineffectiveness and problematic nature of the mitigation strategies are discussed in Table 1. In Table 5 (below), I summarise the SIA's evaluation of the effectiveness of the mitigation strategies for adverse social impacts as these are assessed in the provisional SIMP.

Based on a careful cross-reading of the social risk/opportunity rating and the updated risk/opportunity rating in the SIA (Table 4, Appendix S), I contend that:

- none of the mitigation strategies predicted to result in a significant reduced social risk/opportunity rating (**Green**);
- four predicted to result in some mitigation of the risks and a downscaled risk/opportunity rating (**Blue**);
- ten predicted to result in negligible change in social risk/opportunity rating (**Yellow**);
- ten predicted to result in no change in social risk/opportunity rating (**Red**); and,
- six are contentious and the predicted change in social risk/opportunity rating is challenged (**Grey**).

47. The methodology underpinning my evaluation of the effectiveness of the proposed mitigation strategies is:

- **Significant reduced social risk/opportunity rating** recognised when:
 - the consequence category ® is updated to minor or insignificant.
- **Somewhat improved social risk/opportunity rating** is recognised when:
 - C and the rating is upgraded (e.g. from A3 high to B2 moderate); or
 - C is the same but Likelihood (L) and ability to Remediate ® are updated.
- **Negligible change in social risk/opportunity rating** is recognised when
 - C is the same but one or two sub-categories [Gravity (**G**), Extent ®, Vulnerability (**V**) and ability to Remediate (R)] are upgraded; L is upgraded, and the rating is upgraded; or
 - C is the same, L is upgraded, rating shows minor change; or
 - C is the same, L is upgraded, rating is the same.
- **No change in social risk/opportunity rating** is recognised when:
 - the social risk/opportunity rating remains the same in the original and the mitigated predictions.
- **Contested upgraded rating** is noted where I contend there is a problem with the proposed mitigation strategy or other concerns that must be addressed. These are explained in **red notes** in the table.

Table 5: Summary of negative impact, suggested mitigation strategy, social risk/opportunity rating and updated social risk/opportunity rating after mitigation

- Significant reduced social risk/opportunity rating
- Somewhat improved social risk/opportunity rating
- Negligible change in social risk/opportunity rating
- No change in social risk/opportunity rating
- Contested upgraded rating

Negative impact	Social risk/opportunity rating	Mitigation strategy	Updated Social risk/opportunity rating
Way of life – Housing Impacts on availability and affordability of housing	C = Significant (G2, E2, V1, R2), L = Likely, B5 Extreme	Housing Accommodation Strategy: prioritise local employment; develop strategies for relocation to MSC and UHSC; communication and information with stakeholders.	C = Major (G2, E3, V1, R3), L = Likely B4 High
Way of life – Mobility Increase in travel times and feelings of frustration and annoyance	C = Moderate (G3, E2, V2, R1), L = Almost Certain, A3 High	Workforce Management Strategy: prioritise local employment; develop strategies for relocation to MSC and UHSC.	C = Moderate (G3, E1, V2, R2), L = Almost Certain, A3 High
Way of life – Traffic noise Continued feelings of frustration and annoyance and noise impacts from vehicles	C = Moderate (G3, E3, V2, R1), L = Almost Certain, A3 High	Community Stakeholder and Engagement Strategy: work with near neighbours and residents to identify strategies to address impacts that are reasonable and feasible.	C = Moderate (G3, E3, V2, R1), L = Almost Certain, A3 High
Health and wellbeing – Disruptions Continued negative effects on health due to the stress of participating in the environmental approval process in the hope of influencing the decision and what conditions may be put on them	C = Moderate (G3, E2, V2, R2), L = Likely, A3 High	Community Stakeholder and Engagement Strategy: work with near neighbours and residents to identify strategies to address impacts that are reasonable and feasible. Work with stakeholders regarding mine closure planning.	C = Minor (G3, E1, V2, R3), L = Likely, B2 Moderate
Health and wellbeing – Amenity Decrease in health and wellbeing due to environmental impacts (air quality, dust, noise, blastings, light)	C = Significant (G2, E3, V1, R2), L = Likely B3 High	Community Health and Wellbeing Strategy: work with near neighbours and residents to identify strategies to address impacts that are reasonable and feasible. Work with stakeholders regarding mine closure planning.	C = Moderate (G2, E3, V2, R3), L = Likely, B4 High
Health and wellbeing – Place-attachment Permanent changes to the landscape – Aboriginal community	C = Significant (G2, E3, v1, R2), L = Likely, B5 Extreme	Community Health and Wellbeing Strategy: work with relevant Aboriginal organisations to develop opportunities for participation in rehabilitation activities and cultural activities. Engage with stakeholders regarding mine closure planning. Continue work with the Upper Hunter Mining Dialogue to understand impacts of mining on the region.	C = Major (G2, E3, V1, R3), L = Likely, B4 High Contested due to concerns raised above false causality between impact and mitigation
Health and wellbeing – Place-attachment Permanent changes to the landscape leading to continued solastalgia	C = Moderate (G2, E3, V2, R1), L = Likely, B3 = High	Community Health and Wellbeing Strategy: work with near neighbours and residents to identify strategies to address impacts that are reasonable and feasible.	C = Moderate (G2, E3, V2, R1), L = Likely, B3 High

		Work with stakeholders regarding mine closure planning.	
Health and wellbeing – Place-attachment Permanent changes to the landscape leading to changes in levels of homeliness and connection to land and place	C = Moderate (G2, E3, V2, R1), L = Likely, B3 High	Community Health and Wellbeing Strategy: work with near neighbours and residents to identify strategies to address impacts that are reasonable and feasible. Work with stakeholders regarding mine closure planning.	C = Moderate (G2, E3, V2, R1), L = Likely, B3 High
Health and wellbeing – Place-attachment Permanent changes to the landscape leading to continued eritalgia	C = Moderate (G2, E3, V2, R1), L = Likely, B3 High	Community Health and Wellbeing Strategy: work with near neighbours and residents to identify strategies to address impacts that are reasonable and feasible. Work with stakeholders regarding mine closure planning.	C = Moderate (G2, E3, V2, R1), L = Likely, B3 High
Health and wellbeing – Traffic hazards Perceived increased risk of accidents due to mine workers being fatigued	C = Moderate (G2, E3, V2, R3), L = Likely, B3 High	Workforce Management Strategy: continue induction of employees regarding driving regulations to promote good behavior on local roads Housing Accommodation Strategy: prioritise local employment; develop strategies for relocation to MSC and UHSC	C = Moderate (G2, E3, V2, R2), L = Likely, B3 High
Accessibility – Medical services Continued and possible increased demand on local medical services	C = Major (G2, E1, V2, R3), Likely = L, B4 High	Community Health and Wellbeing Strategy: Consult with relevant medical and community service providers regarding Project workforce expansions or continuations and associated medical and community service demand on a regular basis	C = Major (G2, E2, V2, R2), L = Possible, C4 Moderate
Accessibility – Education Continued and possible increased demand on local educational services	C = Major (G2, E1, V2, R2), L = Likely, B4 High	Community Health and Wellbeing Strategy: Consult with relevant medical and community service providers regarding Project workforce expansions or continuations and associated medical and community service demand on a regular basis Note: assumed mistake that here mentions medical instead of educational service providers, and medical instead of educational service	C = Major (G2, E1, V2, R2), L = Likely, B4 = High
Accessibility – Rural Fire Services (RFS) Decrease in membership and participation in RFS	C = Moderate (G3, E2, V2, R2), L = Likely B3 High	Workforce Management Strategy: Develop a Policy to promote and support workers to participate in local community groups in the MSC, UHSC or SSC LGAs	C = Minor (G3, E2, V2, R3), L = Likely, B2 Moderate
Surroundings – Amenity Continued and potential further decrease in level of amenity and decreased quality of living environment	C = Moderate (G2, E3, V2, R2), L = Almost certain, A3 High	Community and Stakeholder Engagement: Continued engagement with stakeholders directly impacted and interested organisations. Engage with stakeholders regarding mine closure planning. Continue work in Upper Hunter Mining Dialogue.	C = Moderate (G2, E3, V2, R2), L = Almost certain, A3 High
Surroundings – Visual impacts	C = Moderate (G3, E2, V2,	Community and Stakeholder Engagement: Continued engagement with	C = Moderate (G3, E3, V2,

Decrease in visual amenity from the western side of Muswellbrook	R1), C = Almost Certain, A3 High	stakeholders directly impacted and interested organisations. Engage with stakeholders regarding mine closure planning.	R1), L = Likely, B3 High Contested because of potential impact of environmental mitigation strategy and lack of trust in rehabilitation
Livelihoods – Socio-economic: Impact management Lost time and opportunities due to having to manage impacts of mine	C = Moderate (G3, E3, V2, R2), L = Likely, B3 High	Community and Stakeholder Engagement: Continued engagement with stakeholders directly impacted and interested organisations. Engage with stakeholders regarding mine closure planning.	C = Moderate (G3, E3, V2, R1), L = Likely, B3 High
Livelihoods – Socio-economic: Dust Continued housekeeping and cleaning workload due to deposited dust	C = Moderate (G3, E3, V2, R2) L = Likely, B3 High	Community and Stakeholder Engagement: Continue to engage with stakeholders who are directly impacted and interested organisations to develop, implement and review environmental management strategies that are reasonable and feasible. Continue work with the Upper Hunter Mining Dialogue to understand impacts of mining on the region.	C = Moderate (G3, E3, V2, R1), L = Likely, B3 High
Livelihoods – Loss of skilled workers Continued competition for skilled workers in the local/regional area	C = Moderate (G3, E3, v2, R1), L = Almost certain, A3 High	Local Business Procurement: Work with MCCI and the Upper Hunter Mining Dialogue Joint Economic and Social Development Working Group to develop and implement strategies to address competition for workers.	C = Moderate (G3, E3, V2, R1), L = Almost certain, A3 High
Culture – Loss of culture Continued negative impact on cultural identity, connection to country and self-esteem	C = Significant (G2, E3, V1, R2), L = Likely, B5 Extreme	Community Health and Wellbeing Strategy: work with relevant Aboriginal organisations to develop opportunities for participation in rehabilitation activities and cultural activities. Engage with stakeholders regarding mine closure planning. Continue work with the Upper Hunter Mining Dialogue to understand impacts of mining on the region.	C = Major (G2, E1, V1, R3), L = Likely, B4 High Contested due to concerns raised above re false causality between impact and mitigation
Culture – Loss of agricultural culture Continued displacement of agricultural community due mine acquisition	C = Moderate (G2, E3, V2, R1), L = Almost certain, A3 High	Community and Stakeholder Engagement Strategy: Engage with stakeholder regarding mine closure planning and how the Project can contribute to the Upper Hunter long-term transition from coal mining and power generation.	C = Moderate (G2, E3, V2, R2), L = Almost certain, A3 High
Community – Reduced social cohesion Continued loss of social networks, community and reduced social cohesion due to the impact of the decision-making process for voluntary and compulsory	C = Moderate (G2, E3, V2, R1), L = Almost Certain, A3 High	Community and Stakeholder Engagement Strategy: Continue to provide as much information about the Project as commercially practical. Further invest in relationships to mitigate existing impacts and widen the opportunities for benefits.	C = Moderate (G2, E3, V2, R2), L = Likely, B3 High Contested due to concerns

acquisition, reinforced social differentiation and inequality		Engage with stakeholder regarding mine closure planning.	raised above re uncertain causality between displacement impacts and mitigation
Community – Loss of community and displacement Continued loss of rural communities due to mine acquisition	C = Moderate (G2, E3, V2, R1), L = Almost Certain, A3 High	Community and Stakeholder Engagement Strategy: Continue to work with the neighbouring landholders and people from surrounding villages and communities to develop ways for engagement that suit them and is feasible and reasonable. Support for the agricultural industry.	C = Moderate (G2, E3, V2, R2, L – Likely, B3 High Contested due to concerns raised above re uncertain causality between displacement impact and mitigation
Community – Changing demographic and community tension Continued change in demographic from agriculture to mining resulting in community tension and change in the identity of the town from agricultural or rural to mining town	C = Moderate (G3, E1, V2, r1), L = Likely, B3 High	Workforce Management Strategy: prioritise local employment; develop strategies for relocation to MSC and UHSC. Work with agricultural industry.	C = Moderate (G3, E2, V2, R1), L = Likely, B3 High
Community – Reduced social cohesion due to temporary workforce Change in community identification and connection, and loss of social networks and social capital due to presence of temporary resident mine workers	C = Moderate (G3, E1, V2, R1), L = Likely, B3 High	Workforce Management Strategy: prioritise local employment; develop strategies for relocation to MSC and UHSC.	C = Moderate (G3, E1, V2, R1), L = Likely, B3 High
Community – Community tension and division Loss of community cohesion and increased community division and tension because of different perspectives and beliefs on the coal industry and the need to act on climate change	C = Moderate (G2, E2, V2, R2), L = Likely, A4 Extreme	Community and Stakeholder Engagement Strategy: Engage with stakeholders who are directly impacted and interested organisations to develop, implement and review environmental management strategies that are reasonable and feasible. Work with neighbouring landholders and people from surrounding villages to develop a way of engagement that suit them and that is reasonable and feasible. Prioritise local employment; develop strategies for relocation to MSC and UHSC. Support agricultural industry. Work with Upper Hunter Mining Dialogue to better understand impacts.	C = Moderate (G2, E3, V2, R2), L = Likely, B3 High
Health and Wellbeing – Personal and property rights Sterilisation of property market and stranded assets leading to feelings of powerlessness, stress, uncertainty and self-image	C = Moderate (G3, E3, V2, R1), L = Almost Certain, A3 High	Community and Stakeholder Engagement Strategy: Continue to work with the neighbouring landholders and people from surrounding villages and communities to develop ways for engagement that suit them and is	C = Moderate (G3, E3, V2, R2), L = Likely, B3 High Contested based on existing

		feasible and reasonable. Support for the agricultural industry.	research that shows proposed mitigation strategy is unsuccessful in reducing experiences of powerlessness, stress and uncertainty (e.g. Askland 2018, Askland and Bunn 2020)
Decision making system – Powerlessness Continued frustration of continuing dust, noise, blasting and lighting impacts and the need to lodge complaint/s with no perceived change in impacts, resulting in people stop complaining	C = Moderate (G3, E3, V2, R2), L = Almost Certain, B3 High	Community and Stakeholder Engagement Strategy: Continue to work with the neighbouring landholders and people form surrounding villages and communities to develop ways for engagement that suit them and is feasible and reasonable.	C = Moderate (G3, E3, V2, R2), L = Likely, B3 High
Community – Equity impacts Continuation of distributional impacts resulting in changes in social network, community cohesion and reinforcement of social differentiation and inequity	C = Major (G2, E3, V2, R1), L = Likely, B3 High	Community and Stakeholder Engagement Strategy: Continue to work with the neighbouring landholders and people form surrounding villages and communities to develop ways for engagement that suit them and is feasible and reasonable. Engage with stakeholders regarding mine closure planning. Support for agricultural industry. Continue working with the Upper Hunter Mining Dialogue.	C = Moderate (G2, E3, V2, R2), L = Likely, B3 High
Community – Intergenerational equity Intergenerational impacts due to changes to the landscape	C = Moderate (G2, E1, V2, R1), L = Likely, B3 High	Community and Stakeholder Engagement Strategy: Continue to work with the neighbouring landholders and people form surrounding villages and communities to develop ways for engagement that suit them and is feasible and reasonable.	C = Moderate (G2, E1, V2, R1) L = Likely, B3 High
Health and Wellbeing – Fears and aspirations Continued fear of losing home and livelihood	C = Moderate (G2, E1, V2, R1), L = Likely, B4 High	Community and Stakeholder Engagement Strategy: Continue to work with the neighbouring landholders and people form surrounding villages and communities to develop ways for engagement that suit them and is feasible and reasonable.	C = Moderate (G2, E3, V2, R2), L = Likely, B3 High

48. As shown in Table 5, the proposed mitigation strategies will only have limited success and the local community of Muswellbrook, including the small rural villages closer to the mine, will remain subject to significant adverse social impacts for the duration of the Project.

49. As required, the SIA identifies, predicts and assesses the impacts of the SSD Process (Appendix P) and the Construction Phase (Appendix Q, Table 11). Both these assessments identify and predict

significant adverse impacts related to the specific stages of the Project development, of which many replicate those caused by the current operation. I refer the reader to these specific assessments for further information about these predicted impacts, mitigation strategies and the social risk/opportunity rating.

Shortcomings in the SIA

50. The SIA **does not adequately problematise the temporal and material dimensions of the Project** as these relate to, and underpin, social impacts:

- There is no rigorous analysis of the social impacts that an extended 22 years of operation will have on the local community beside the recognition of the positive benefits associated with the economic impacts, including employment in the mining sector, VPA, ADCF and other financial community contributions.
- There is no analysis of the implications of the extended 22 years of operation for individual and family well-being, particularly for long-term residents in Muswellbrook and the rural villages who want to retain their family connections to the region but who are not part of the mining economy. The duration of the Project is significant when thinking about this in the life course of humans, extending the Project for a whole generation. This is particularly concerning for older residents who are already negatively impacted will have to endure the adverse social impacts in the context of potential increased isolation and deteriorating health, and who may have more restricted mobility, limiting their options for relocation, than younger people (Nicholls 2020).
- The topic of rural displacement and community resilience is only dealt with superficially and further interrogation is required into how the timeframe of the Project, the extension of current operations and the material dimensions, particularly related to the changing landscape and proposed final void, will lead to (a) physical displacement and (b) experiential displacement (Ramsay and Askland 2020), and the implications this will have on the remaining community.

51. The SIA **does not adequately problematise the distributional inequity of the Project:**

- The fact that Muswellbrook, which is one of the centres for mining activity in a region otherwise showcasing general prosperity, endures a significant level of disadvantage should be problematised. Whilst claims are made about the economic benefits of mining, the social baseline show that these benefits are not evenly distributed. Muswellbrook Council has acknowledged that the male-dominance of mining and the employment *lost* because of expanded mining disproportionately affects women, Indigenous people and socially

disadvantaged groups. Expanding mining may, therefore, exacerbate existing social inequity and socio-economic challenges. This issue was raised by Muswellbrook Shire Council in their submission for the EIS exhibition process, and constitutes a significant concern. The issue of distributional equity requires much more rigorous analysis and the claims of economic benefit should be positioned in relation to this.

- The quantitative data presented in the Community Survey Report indicate a deep bias in the quantitative data that skews the analysis in the favour of the proponent: Significantly more men than women participated in the survey (60% men and 37% women), and 52% of the respondents either work at or supply goods or services to the mine, with an additional 16 respondents working in other mine. The workforce survey conducted for the SIA indicates that 80% of the workforce are men. These observations, indicate that the survey has a significant **male bias** that is highly likely correlated with a **pro-mining bias**, with the majority of respondents being likely beneficiaries of the Project.
- The community survey illustrates the deep social problems caused by mining in the region and that are highly likely to be worsened by the Project. The community survey shows an **obvious gender split** between perceived and actual benefits of the Project.
- Regardless of the bias embedded in the survey population, the results of questions about the current operation suggest that negative attitudes to mining and significant concerns about environmental and social impacts are held by men and, by inference, people working in the mine, with significant negative results (i.e. concerns or experiences of negative impact of operation) across variables such as impact on water, living environment and visual amenity.
- Overall, women appear more likely to perceive the negative social impacts of the current operation at Mount Pleasant and the Project. This is a concerning finding that should have received much greater attention in the SIA.

52. The SIA does not adequately address issues related to climate change and the likelihood for increased 'extraordinary events', which enhance adverse impacts, particularly related to dust:

- As evidenced by the EIA (Section 7), levels of complaints are generally higher during so-called 'extraordinary events' (pg. 44, cf. Section 7, Appendix B). As explained in the Lock the Gate Alliance's submission for the Project (17 March 2021, pg. 6, my emphasis):

In 2019, 57 "extraordinary event" days were advised by the DPIE, with the majority associated with bushfire activity and some dust storms/regional dust events. MACH Energy notes that air quality levels in the vicinity of the mine may have been materially affected by regional dust or bushfire events that occurred on other days. Nevertheless, five exceedances of average 24 hour PM₁₀ limits (50µg/m₃) were recorded by on-site

PM₁₀ monitoring. The highest exceedance of 61.2µg/m₃ was recorded by APF2 on 15 November. MACH Energy argues that while this day was not specifically identified as an “extraordinary event” day, it occurred during the period of bushfire activity in late 2019 and noted the following eight days were identified as “extraordinary event” days due to bushfire, and was attributed to bushfire activity (MACH Energy, 2018a). *The Independent Environmental Audit of the mine in 2020 found that there were air pollution exceedances occurring compared to the environmental assessment predictions, but attributed these to “extraordinary events.”* However, the audit team also observed non-compliances in the management of activities that generate dust, particularly haul trucks dumping overburden without attending water carts, and without reducing speed, regardless of dust rising well above wheel height. This finding is relevant to consideration of the Optimisation project given the reliance in the Air Quality Assessment on mitigation activities to prevent the expected increase in the number of days that homes near the mine will experience air pollution that breaches national and New South Wales standards.

- Whilst the linking of exceedances to “extraordinary events” may remove the responsibility from the mine it **does not reduce the severe adverse impact that residents are exposed to**. It can be argued that the declaration of extraordinary events may mask the contributions to poor air quality by the mine. **In relation to the Project, the link between climate change and the subsequent expected increased number of ‘extraordinary event’ days should be problematised and analysed. This link is likely to exacerbate fear related to poor air quality, and it has significant implication for health and wellbeing.** As noted in the quote by Preston CF (see 42, above), such perceived impacts are real impacts that must be taken into account in the SIA and could be cause for rejection of a development proposal on the grounds of social impacts even if the impact comply with industry standards.

53. An important part of an SIA is to set Social Locality of a proposed development (NSW Government 2021, pg. 16-17). This includes analysis of the scale and nature of the Project, who may be affected, where any vulnerable or marginalised people may be affected, built or natural features on or near the project that may be affected, relevant social, cultural, and demographic trends, and other change processes, and the history of the proposed project and area. The SIA for the Project sets the Social Locality (‘Social area of influence’) based on a ‘whole of project approach.’ This includes: the mine site, workforce, transport of coal via rail to Newcastle, the Biodiversity Offset Areas and the Aboriginal Heritage Conservation Area associated with the approved Mount Pleasant operation (SIA, pg. 13). I concur with the ‘whole of project approach’ and am overall satisfied with the SIA’s approach to Social Locality.

54. There is, however, one key issue that has **not** been addressed in the SIA, which is the **potential social impacts for the community along the trainline from the mine to Newcastle**. Communities along the trainline and the Newcastle suburbs close to the port will endure ongoing negative impacts from the trains, including noise, dust and disruption to traffic flow. As with the other social impacts discussed above, the extended duration of operation and the increased rate of extraction are central concerns to consider in relation to the social impacts the transportation of coal from mine to port will have on affected communities along the trainline. The coal will be transported along the Muswellbrook-Ulan Rail Line and the Main Northern Railway to the Port of Newcastle for export, or to domestic customers. Production will be gradually increased over the course of 18 years, with peak production to be reached in 2041. The current operation at Mount Pleasant has approval for up to 9 laden trains a day, with an average 3 laden trains making it from mine to port per day at the time of the EIS. The Project seeks approval for up to 10 laden trains per day and it is expected that there will be an average of 6.5 laden trains going to Newcastle per day. This is significant and the extended duration and quantity of coal transport from Mount Pleasant will lead to extended environmental and social impacts on the communities along the train line. This has not been identified, predicted or assessed in the SIA.

Additional potential social impacts of the Project not identified in the SIA

55. Having reviewed the EIS and RTS, I have identified two key issues that are not picked up and assessed in the SIA, namely: (1) no analysis of the social impacts of final mine design, in particular the proposed final void; and, (2) increased risk due to loss of transmission signals because of mine design. These are issues of concerns raised by respondents to the SIA, which are substantiated by my ongoing research with mining-affected communities in the Hunter as issues that must be addressed.

56. **No analysis of the social impacts of final mine design, in particular the proposed final void.** The current operation has approval to leave three voids. The EIS explains how the Project will instead leave one, larger void. The design of this void is explained in technical detail, and it is argued that the environmental impacts will be minimised and managed. Nonetheless, the final void presents significant issues that should have been assessed in the SIA. These include:

- Timeframe: it will take more than 500 years for the equilibrium water levels to be reached. Final void salinity levels will slowly start increasing after that as a result of evapo-concentration.
- Polluted waters: the water of the void will become highly saline.

- Size: the size of the final void is significant (approximately 3km long, 600-700m wide and 90m deep). This will leave a significant polluted visual imprint on the landscape.
- Design: the slopes of the void are very steep, (up to 37% in places), and it will be difficult to maintain and traverse.

57. The final void is an unsatisfactory part of mine design. As part of the consultation process, Muswellbrook Council requested a no-void scenario. This was rejected by MACH Energy on the basis of the costs associated with a no-void mine plan, rendering the Project uneconomic. The concerns raised by council are, however, important and considering the scale and timeframe it will take for the void to reach equilibrium its social impacts should be carefully analysed. Until the void has reached equilibrium, opportunities for repurposing the landscape is very limited. **Considering one of the criteria for the approval of a void being that it can be beneficially re-used in the future, there is an argument for this Project to be rejected on the basis of its final design** (NSW Government 2017b). Adding to this is the proposal forwarded in the 2017 NSW Government *Mine Rehabilitation Discussion Paper* (NSW Government 2017b) that, in order to be considered acceptable as part of a new mining project, voids are only to be considered in new major projects if they minimise environmental, community and visual impacts and they cannot be feasibly removed. **The social acceptance of the final void is not measured in the SIA, despite the significant part the final void plays in the Project's final landform design.**

58. As stated in the NSW Government Discussion Paper *Improving Mine Rehabilitation in NSW* (November 2017b):

there have been growing concerns about the impacts of final voids. People living in areas where mining occurs and the broader community are concerned that mining companies are externalising costs by leaving final voids and other potential residual liabilities.

The submissions made during the EIS exhibition period and summarised in the Response to Submissions (RTS) report, indicate that there is significant community concerns about the size of the proposed final void and its future legacy. MACH Energy does not address the social and affective dimensions of the final void in their response to submissions and restrict their responses to the technical details and a discussion about the no-void/void scenario only. It is unclear who will be responsible for the maintenance of the final void over the course of time. Who will be responsible for the final void over the next 500 years until it has reached equilibrium? The response does not allow questioning of the *affective* and long-term implications of living next to a void. These are issues that have been captured in research conducted with mining affected communities in the Hunter (Askland 2020; Dahlgren 2022) and it is a significant issue that should be addressed in the SIA.

59. **Increased risk due to loss of radio, phone and TV signals.** Muswellbrook Shire Council raises the concern about the impact of the integrated waste rock emplacement landform on radio, phone and TV signals. The issue of transmissions has not been adequately mapped in neither the EIS or the SIA. Loss of transmissions signals could have severe social impact (Gravity 1 – impact will cause death or adverse health impacts including long-term illness or disability). In the RTS, MACH Energy confirms that it will be agreeable to a consent condition requiring make-good provisions should the integrated waste rock emplacement result in adverse terrain effects on transmission facilities. In addition to this being an important part of the conditions for development should the Project be approved, further analysis of the social impacts, particularly as it may impact people’s fear for health and wellbeing, is required.

60. In addition to these two key points, it should be noted that there is **no link to the economic cost of social disruption (including mental and physical health decline) and displacement of alternative industries.** Considering the emphasis placed on the economic benefits of the project, further mapping of the cost of the adverse social impacts is required as part of the SIA.

OTHER CONCERNS ABOUT SOCIAL IMPACTS OF THE PROJECT AND THE SIA

61. After reviewing all the documents of the SIA, as well as various sections of the EIS (see list, pt. 4, above), a crucial concern has emerged in relation to the social impact assessment of the current operation and the Project. This relates to the fact the current operation and, subsequently, the baseline for the Project, rests on an approval from 1999, which was based on an EIS conducted two years prior. It is unclear from the documents that I have reviewed what the process of assessing potential social impacts was for the original EIS, and if there was a review of the social impacts prior to operation commencing in 2017. The almost 20 years delay from the original EIS to the start of operation in 2017 means there had been a severe change in the social base line; the SIA assessment, if it existed, and proposed mitigation, which appears minimal regardless, could therefore be claimed to be invalid. Between 1999 and 2017, the local area went through a significant process of change, which led to economic growth as well as adverse cumulative negative impacts due to the multiple mines that started operating in the region. These communities have been victims of a failure for adequate assessment, planning and approval, as is evident in the lack of mitigation and management strategies for key social impacts of the current operation (see Table 1). The legacy of this poor planning track record should be considered.

62. The negative impacts on the local community, particularly the smaller rural villages surrounding Muswellbrook and that are within the mine lease, go back to the start of the current operation in the

late 1990s. Put in context of the proposed timeframe for the project, these communities will be exposed to adverse negative impacts for 60 years before they will have the opportunity to start planning for a post-mining future, rehabilitation and restoration. What little is left of these smaller rural may be salvaged should this Project not go ahead but, based on what has happened within other mining communities in the region (e.g. Wollar, Warkworth, Ravensworth), it can be predicted that the smaller villages surrounding the mine will become unsustainable if Project is approved.

63. There are a number of statements in the EIS documentation suggesting that the Project will have no material incompatibility with the existing operation. For example, in the Executive Summary (pg. 19), it is stated:

There would not be any material incompatibility between the Project and existing rural residential land uses, given that the assessment outcomes are similar to the approved Mount Pleasant Operation, and key Project management measures would comply with relevant Government policy.

64. This statement and others like it are incorrect from a social impact perspective. The social base line and the analysis of the impact of the existing operation on the surrounding rural land use imply that there are deep problems with this idea of co-existence. Rural residents and farmers who contributed to the SIA, either as key stakeholders or through the community survey, report experience of negative impacts from the neighbouring mine that implicate their everyday life and business (Community Survey and SIA, Appendix H). Furthermore, these statements show a disregard of the temporal condition of the extended duration of the Mount Pleasant mine; the simple fact that the life of the mine will extend for 22 years mean that opportunities for farming and alternative land use on land within the mine's footprint will be delayed. This is likely to have cumulative negative effects for local communities, with a likely progressive loss of private landholders as people fold and sell to the mine.

65. For example, the private landholder and farmer of Glen Eden Holsteins who employs nine (9) employees have indicated that, should the Project proceed, they will sell to the mine because of the adverse impacts the mine is having on their lives and business. As is indicated in the following excerpt from the SIA Appendix H (pg. 39-40), this is an extremely difficult decision that is causing a lot of stress. The uncertainty that is expressed in this quote resonates with many of the local residents cited in the SIA.

MACH have agreed to negotiate to purchase our properties, but any purchase agreement will be conditional and only if the SSD Application is approved. This makes us feel like we can't complain or object to the SSD application. We feel that they feel they are doing us a favour by

buying us out if the SSD is approved. It all builds up to us feeling like MACH has all the power and we have none, we and our business are at their discretion. ... Between the ongoing denials of environmental impacts and lifestyle impacts, the purchase of surrounding land and water, reductions in the value of our properties as a consequence of mining, the added costs to our business in dealing with existing mining impacts, concerns of the cost of future mining impacts and the delays in negotiating a purchase of our properties, we are feeling very frustrated with where we find ourselves. Through no fault of our own, after forty years successfully operating our business, producing premium milk and milk products, employing local people and raising our families on Glen Eden, we find ourselves in jeopardy of losing our business, our lifestyle and our families' future. We feel as if we are being squeezed out. But MACH won't give us certainty by buying us outright, in advance of the SSD approval, so we are stuck, trying to make the best of a situation that is getting worse and that we have no control over (SIA, Appendix H, pg. 39-40).

66. Another example of the muting of social impacts in the EIS are statements that assume acceptance and trust in proposed rehabilitation plans and final mine design. For example, in relation to the impact on the village of Aberdeen, which is only 5km from the project, it is stated:

The approved Mount Pleasant Operation was predicted to have high visual impacts at elevated viewpoints in Aberdeen, and high-moderate impacts are expected for the project. These impacts would be mitigated through progressive rehabilitation. With the adoption of the Project management measures there would not be any material incompatibility between the Project and the village of Aberdeen.

67. A number of submissions received as part of the exhibition of the EIS suggest that there are significant concerns amongst residents of Aberdeen about the potential environmental impacts the Project will have—inducing visual impacts and air pollution. As above, the extended timeframe of the Project will see an expanded duration, with potential cumulative gravity, of such impacts.

68. The submissions indicate a low level of trust and acceptance of the mine rehabilitation plans and a level of cynicism to the idea of 'natural design'. These are all issues that can result in solastalgia (Albrecht 2005) and eritalgia (Askland nd). It is misleading to suggest that there is no material incompatibility between the Project and local communities (not only Aberdeen) and from a social impact assessment perspective these impacts are significant. Indeed, as observed in Muswellbrook Shire Council's submission, the Project will have 'significant and permanent visual impact' and it will 'create a new visual setting by limiting views to the high points in the landscape from many locations in and near Muswellbrook' (Muswellbrook Shire Council submission, 22 March 2021, pg. 6).' These

impacts are dismissed as 'short to medium term impact until people forget what the view once was like' (Muswellbrook Shire Council submission, 22 March 2021, pg. 6) before the landscape changed.

FURTHER OBSERVATIONS

69. Submissions received during the EIS exhibition period suggest a significant opposition to the proposed development, with 125 public submissions objecting, 95 supporting and 3 commenting the Project. Likewise, the majority of NGO submissions are objections, with 15 objecting, 11 supporting and 1 commenting. Despite all the objections, no material amendments were made to the Project. Both the quantity of objections received and the concerns raised within these submissions indicate that the Project is **highly contested** and many people, both from the local region and broader social locality, are concerned about the Project's projected impact and see the Project as a distraction from the current pathway towards a post-mining future for the region.

70. Whilst the EIS argues there are no concerns about water and that the Project have all required water licences, local landholders raise concerns about the competition for water and claim that the mine has bought water licences at the expense of local farmers. This should be further interrogated and explored as an issue with potential adverse social impacts for local landholders and farmers particularly.

Acquisition and mitigation rights

71. It is implied that the Project offers better conditions for local residents and that amenity issues are reduced due to the mitigation measures associate with the Project. This is contentious, and I refer back to the information presented above, where I note how environmental impacts related to visual impacts and amenity (including noise and dust) constitute social impacts even if the technical assessment of such impacts complies with the relevant development standards (see, pt. 42 and 51, above).

72. There are currently 32 privately-owned residences or land predicted to be *significantly* affected (28 by noise, 2 by air quality, and 2 by noise and air quality), all of which have voluntary acquisition rights under the existing consent. There are 20 privately-owned residences that are predicted to be *moderately* affected (all by noise), all of which have voluntary mitigation rights. Reading the qualitative responses to the community survey and the stakeholder case studies, I believe many people have been holding out and not used their acquisition right as yet because of the planned closure of the mine and the opportunity to move on with plans for homes and businesses.

73. MACH Energy proposes a number of mitigation measures as part of the new Project design, including staging the increase in production, designing the eastern emplacement to shield noise, constructing a noise barrier along the rail spur, and operational mitigation measures. As noted above, these mitigation measures will present other adverse social impacts, including visual impacts and sense of lost heritage, due to the changes in the landscape. Nonetheless, based on these environmental mitigation measures, MACH Energy reduces the number of impacted properties to include: 16 privately-owned residences (on 12 properties) predicted to be *significantly* affected (2 by noise, 1 by air quality, and 13 by both noise and air quality), and 14 privately-owned residences (on 12 properties) predicted to be *moderately* affected (all by noise).

74. Out of the properties mapped within the acquisition and mitigation zone, all but 3 receivers already have voluntary acquisition or mitigation rights. **The Project relinquishes the acquisition rights for 19 receivers.** Of these:

- two (43 and 43b) had acquisition rights for noise and air quality. These receivers will be eligible mitigation rights for noise under the new Project;
- two (20 and 21) had acquisition rights for air quality. These receivers will be eligible for mitigation rights for noise under the new Project;
- five (47, 67, 96, 102 and 108) had acquisition rights for noise. These receivers will be eligible for mitigation rights for noise under the new Project;
- ten (25, 45, 112, 143c, 143d, 153b, 158, 447, 448 and 449) lose acquisition rights and will not be eligible for mitigation rights under the new Project.

75. **The Project relinquishes the mitigation rights for 15 receivers** (19, 68, ,77, 79, 80a, 84a, 139, 140c, 154, 203, 207, 257, 258, 259, 526).

76. Although the Project may bring the projected air quality and noise measures within the relevant development standards, these properties will continue to endure adverse impacts and falling beneath the impact line does not mean that the lived experience of adverse impacts related to noise and dust will subdue. With the extended timeframe of the Project, the cumulative impact of on-going mining will subject these receivers to long-term negative impacts. Based on this, I agree with the EPA who in their submission note that the 30 receivers with noise-related acquisition rights and 20 receivers with mitigation rights under the existing consent should retain these rights under any consent for the Project. Legacy acquisition/mitigation rights should be grated and appropriate mitigation measures for remaining landholders who do not obtain acquisition rights must be put in place to minimise the negative impacts of depopulation should the Project be approved for development.

Department's Assessment Report

77. As mentioned above, the Department's Assessment Report completely disregards the significant adverse social impacts predicted for the Project. Despite SIA clearly identifying, predicting and assessing social impacts at the highest rate of the significance/consequence scale, the Department fails to adhere to its own principles for Social Impact Assessment and the requirement of an integrated and holistic assessment of social impacts in accordance with the environmental, economic, health and heritage assessments of the project.
78. The Department devalues the social impacts and places them under the heading of 'Other impacts', failing to recognise the central link between social and environmental impacts, particularly impacts related to final mine design (including final void), landscape change, visual and amenity impacts. This goes against the Department's own guideline and must be reconsidered.
79. The Department does not problematise the impact of the extended duration of coal mining at Mount Pleasant and how this goes against the goals and plans for diversification and transitioning held by the Upper Hunter and Muswellbrook Shires. In my opinion, it is clear that the Department in its assessment has prioritised economic benefits over all other concerns.
80. If the Project is approved, I urge the Department to revise the Development Consent to include a condition for a SIMP to be developed in the first 12 months following Project determination, and to offer legacy/acquisition rights.

IN CONCLUSION

81. The Project is proposed at a time when the Hunter Valley is embarking on the pathway to a post-mining future. The Upper Hunter Shire Council (**UHSC**) has adopted a stated policy opposing coal mining within the Shire and, in their *2022-2032 Community Strategic Plan*, Muswellbrook Shire Council (**MSC**) recognises that the majority of residents want to see a diversification away from coal and emphasises the need to diversify the economy and facilitate development in intensive agriculture, innovative manufacturing, health services and other growth industries. In line with building economic prosperity through diversification, MSC places social equity (inclusive and interconnected community), environmental sustainability, and cultural vitality at the centre of its strategic plan. The proposed Project contradicts the strategy and intentions of MSC, and jeopardises the hope that people in the region have for advancing away from coal and towards a just transition. Furthermore, as shown in this report, community tension is highly likely to rise and community

cohesion will be compromised, thus working against the strategy to build an inclusive and interconnected community with equal participation for all.

82. Whilst the Project is located in MSC, it is on the border to UHSC, and, as such, the objection to coal mining in UHSC should be taken seriously. Ideas about place and place attachment in the Upper Hunter is strongly connected to its relaxed, healthy rural lifestyle, the community spirit, and the natural and rural environment. Residents of UHSC, in particular in Aberdeen, will endure the negative environmental impacts of the Project, including dust and noise. The visual impacts of the Project will impede on the scenery that brings people to the Upper Hunter, extending the industrial landscape for those travelling from Singleton through Muswellbrook to the Upper Hunter for an additional 22 years. For long-term residents in the UHSC and MSC, the landscape has become non recognisable due to the intensification of mining and the Project will extend this imprint and flatten hopes for renewal and regeneration. As stated by one of the key stakeholders in the scoping SIA:

Castlerock Road is quite extraordinary. It provides an opportunity for people to see the escarpment and bushlands, you can see the interlocking mountain ranges, and the three towns; Scone, Aberdeen, Muswellbrook; plus hundred of historic working farms, and prehistoric sites. It could have been a crowning tourism feature of the area. People in the area value not only the road but also the view it provides. It is the elevated place where you can see up and down the Hunter Valley – that view will now be lost ... Because the ridge line will be gone, the mine will be ever more visible from Aberdeen and Scone.

83. The potential economic benefits of the project must be considered in relation to the adverse social impacts that the Project represents. The SIA shows that those who are not beneficiaries of the project, who will not gain employment and enjoy the economic benefits that the mine may bring, already experience significant stress and anguish. They express considerable concern about the future, indicating *eritalgic* distress (Askland, nd), which is stress is closely linked to the sense of a lost future (in-place). The timeframe and the scale of the Project will delay the process of rejuvenation and rehabilitation that people in the community hold strong hopes for and that they see as the future of their place—both for social and economic prosperity and cultural vitality.

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Social Impact Assessment

Mount Pleasant Optimisation Project (SSD-10418)
NSW Independent Planning Commission Public Hearing

Dr Hedda Haugen Askland
The University of Newcastle
7-8 July 2022

Expert review of social impacts

Environmental Impact Statement

Executive summary

Section 3 – Project Description

Section 6 – Engagement

Section 7 – Environmental Assessment

Section 8 – Evaluation and Conclusion

Appendix N – Social Impact Assessment

Response to Submissions

Submissions Reports: Request RTS (19 Mar 2021)

Submission Report: Att G & H

Submissions Report – Main Text and Att A to F

Submission by Lock the Gate Alliance (17 Mar 2021)

Relevant Agency Advice

Advice on EIS – Muswellbrook Shire Council
(22 Mar 2021)

Advice on RTS – Muswellbrook Shire Council
(26 July 2021)

Advice on EIS – NSW EPA (17 Mar 2021)

Department's Assessment Report

Department's Assessment Report
Recommended Conditions

Conclusion of review

In light of the evidence presented in the documents reviewed, I contend that:
the social impacts of the proposed Project are significant and that the proposed mitigation strategies are ineffective.

Key issues:

- the proximity between the proposed mine and private residents and the township of Muswellbrook and Aberdeen
- the impact that the mine will have on people's health and wellbeing, culture sense of place and community
- social impacts related to amenity (noise and dust) and visual impacts
- the depopulation of neighbourhoods and rural villages
- impacts on landscape as heritage
- distributional equity.

Continued, extended and potentially exceeded adverse impact

The SIA conducted for the Project confirm that the local community are already enduring significant negative impacts from the current Mount Pleasant operation.

These adverse impacts will continue, potentially exceed, if the Project is approved, with likely further displacement of the smaller rural communities surrounding the mines, decrease social cohesion, and tensions within and potential rupture of the local community. Opportunities to move forward on a pathway towards a post-mining future and build a just transition will be delayed and potentially lost.

Ineffective mitigation strategies

Overall, similar mitigation strategies proposed for Project as what is in place for the current operation at Mount Pleasant. The baseline of the SIA show that:

- The mitigation strategies address that address **economic impact** as it relates to employment, training and community contribution (including the VPA and ACDF) has been successful at compensating for some impacts, particularly in their support of community initiatives and Aboriginal programs within the region, but they have not been successful in obtaining an overall support for operation within the local area where concerns around inequitable distribution of benefits and costs remain fuel for community tension and reduced social cohesion.
- The mitigation strategies for **impacts related to place-based variables** are insufficient and those who live most closely to the mine, within the small villages surrounding the mine, who have an affinity with and reliance on the pre-mining landscape report impacts related to dust, noise, visual impacts, with self-reported health impacts, including mental health, and reduced individual and community well-being.

Moral concern: distributional (in)equity

The Project presents a **moral concern** regarding the weighting of social, economic and environmental impacts, which require valuation of social, economic and environmental costs and benefits as they manifest within different locations.

There is a **distinct inequity** embedded in the Project, which exposes some parts of the population (landholders in the rural villages next to the mine, women, Aboriginal people and people in low-income household) to distinct impacts, which are not adequately accounted for in the EIS.

(Economic) benefits and adverse (socio-economic) impacts are inequitably distributed across the population, potentially fuelling existing inequity in the region and Muswellbrook specifically.

This inequity is mentioned in the SIA but **undermined through the layers of reporting of social impacts in the overall EIS**, resulting in a muting of adverse impacts.

Muting of impacts in EIS

There is a serious disconnect between the SIA and the broader EIS reporting of social impacts

The recognised impacts in the SIA are not captured in the EIS:

- The overarching EIS treats social impacts as separate to the environmental impacts of the Project and the changes that the mine will present, both short and long term, to the landscape.
- The details in the SIA about the social impacts and the significant risks that are identified, particularly in relation to place attachment, livelihood, community and wellbeing, are undermined in the general presentation and summaries of social impacts in both the SIA and the broader EIS.

Failure of Department to recognise significant adverse impacts

The Department has failed to appropriately assess the Social Impact Assessment (SIA) conducted by the Proponent.

Despite the significant social impacts that the Project will have, the Department places social impacts within the category of 'other' and dismisses the severe adverse impacts that the Project will have.

The Department places the Proponent's economic considerations higher than the social, environmental and economic considerations of the community.

This failure results in a severe omission in the draft Development Consent: no requirement for SIMP and no legacy acquisition/mitigation rights.

Evaluation of the SAI

Overall, the SIA presents a comprehensive and rigorous analysis of existing social impacts of the approved Mount Pleasant operations and the projected impacts the Project, which is in line with the expectations of the 2017 SIA Guideline for State Significant Mining Petroleum Production and Extractive Industry Development.

Main concern is the **lack of correspondence** between the identification, prediction and assessment of SIA and the presentation of social impacts in the EIS and the Department's Report, which **undermines the significant, extreme and almost certain adverse circumstances to the benefit of the economic benefits of the project.**

Shortcomings of the SIA

No-development scenario: either-or analysis, failing to take into account the spectrum of possibilities for growth in other industries and alternative project. Overemphasis on economic projections and invalid baseline.

Brownfield development application skews social baseline: not given adequate analysis.

Furthermore, the SIA does not:

- **adequately problematise the temporal and material dimensions of the Project** as these relate to, and underpin, social impacts.
- **adequately problematise the distributional inequity of the Project**
- **adequately address issues related to climate change and the likelihood for increased 'extraordinary events'**, which enhance adverse impacts, particularly related to dust.
- **analyse the full impact on social locality**, specifically as this relate to the transportation of coal.
- **identify, predict and assess the social impacts of final mine design**, in particular the proposed final void.
- **identify, predict and assess the risks associated with loss of radio, phone and TV signals** that may result from the integrated waste rock emplacement

Social impacts

Social Impact Assessment Guideline For State Significant Projects
NSW Department of Planning and Environment, November 2021

‘Social impacts’ generally refer to the consequences that people experience when a new project brings change.

For the purpose of the SIA, **‘people’** are classed as individuals, households, groups, communities or organisations.

The **purpose** of a SIA is to identify, predict and evaluate likely social impacts arising from a project and proposed responses to the predicted impacts.

A SIA should assess projects from the perspective of people, which include the **categories** of: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision making systems.

Social impacts can be **negative**, **positive** and **cumulative**.

PREDICTED POSITIVE IMPACTS

CO = Current Operation

Impact category	Impact	Affected parties	CO	Contested because (of)
Way of life	Employment	People employed and their families, local businesses and employees	Yes	
	Housing	Homeowners and investors	Yes	
	Recreation (funding)	Residents and visitors of the Hunter Region	Yes	
Health and wellbeing	Employment	MACH Workforce and suppliers and their families	Yes	
Accessibility	Medical services	Mine workforce and their families and neighboring landowners and their families	U	increased pressure on health system
	Education	Childcare and education service providers	U	
	Community participation	Community groups and organisations	Yes	negative impacts linked to 12 hour work day and limited participation
	MACH Community contribution	Organisations who receive donations and the people they support	Yes	
	VPA	Residents living in the MSC LGA	Yes	
	Biodiversity offset	People living and working in the BMA properties and the services they access	Yes	
	Surroundings	Biodiversity offset	On behalf of the Australian population	U

PREDICTED POSITIVE IMPACTS

CO = Current Operation

Impact category	Impact	Affected parties	CO	Contested because of
Livelihoods	Socio-economic: Employment	Current employees and contractors	Yes	
	Socio economic – Local economy	Local businesses in Muswellbrook, Upper Hunter and Singleton LGAs	Yes	conflicting data in SIA and no scaling of social locality
	Socio-economic – Local economy	Businesses in Muswellbrook, Upper Hunter and Singleton LGAs	Yes	
Culture	Biodiversity offset	Businesses in Merriwa and Cassili	U	this would not be a requirement without the mine and loss of biodiversity not id as social impact
	Opportunities to connect	Aboriginal community with connections to the land and water being impacted	Yes	problematic causal link to management strategy
	ADCF	Aboriginal community	Yes	
Community	Biodiversity offset	People living and working on the BMA properties and the services they access	U	maintaining agricultural productivity does not equate to maintaining agricultural culture
	Biodiversity offset	People living and working on the BMA properties and the services they access	U	this would not be a requirement without the mine and loss of biodiversity not id as social impact

Decision
making system

PREDICTED NEGATIVE IMPACTS

UG = Updated Rating; CO = Current Operation; SM = Successful Mitigation

Impact category	Impact	Affected parties	UG	CO	SM	Mitigation Strategy
Way of life	Housing	Low income households in Muswellbrook, Upper Hunter and Singleton LGAs		Yes	N	
	Mobility	Other road users		Yes	N	
	Traffic noise	Near neighbours who share access		Yes	N	
	Recreation – race club	Trainers, owners, members and visitors		Yes	N	
Health and well-being	Disruptions (stress planning process)	Neighboring landholders and people from surrounding villages and communities		Yes	N	
	Place attachment	Aboriginal community with connections to land and waters being impacted		Yes	N	
	Amenity	Residents who experience amenity impacts	Yes			
	Place attachment	Near neighbours and residents of surrounding rural communities and Muswellbrook		Yes	N	
	Employment conditions	MACH workforce and families		Yes	N	
	Traffic hazards	Other road users, emergency services		Yes	N	

PREDICTED NEGATIVE IMPACTS

UG = Updated Rating; CO = Current Operation; SM = Successful Mitigation

Impact category	Impact	Affected parties	UG	CO	SM	Mitigation Strategy
Health and well-being (cont.)	Personal and property rights	Property owners who are impacted by Project but who do not gain acquisition rights. Additional: landholders with AR but who do not want to leave		Yes	N	
	Fears and aspirations	Downstream of mine on the Sandy Creek catchment worried about losing home and livelihood. Additional: rural villages and landholders nearby the mine, particularly farmers		Yes	N	
	Fears and aspirations	Other BMA property and neighboring owners and managers, and Merriwa and Cassilis district worried about BMA properties becoming 'locked up'. Additional: greater public due to concern about post-mining land use and climate change		Yes	N	
Accessibility	Medical services	Mine workers, their families and neighbouring landowners and their families in MSC LGA		Yes	N	
	Education	Childcare and educational providers. Additional: families and children in MSC LGA		Yes	N	
	Rural Fire Service (RFS)	RFS and people reliant on RFS services		Yes	N	
	Emergency services	Emergency service providers. Additional: residents of MLC LGA		Yes	N	
Surroundings	Amenity	Near neighbours and residents of surrounding rural communities in Muswellbrook		Yes	N	

PREDICTED NEGATIVE IMPACTS

UG = Updated Rating; CO = Current Operation; SM = Successful Mitigation

Impact category	Impact	Affected parties	UG	CO	SM	Mitigation Strategy
Livelihood (cont.)	Visual impacts	People who live, work, play or travel through the western side of Muswellbrook		Yes	N	
	Socio-economic – Impact mgmt.	Near neighbours who loose time and opportunities because they have to manage the impacts (including complaints)		Yes	N	
	Socio-economic – Dust	Residents who experience dust impacts		Yes	N	
	Loss of skilled workers	Employers who have lost workers to the Mount Pleasant Operation. Additional: local residents who need services by affected employers		Yes	N	
Culture	Loss of culture	Aboriginal community with connections to the land and waters being impacted		Yes	N	
	Loss of agricultural culture	Landowners taking up voluntary acquisition and relocating out of the district. Additional: landholders who remain in villages and people with connections to the displaced communities		Yes	N	
Community	Reduced social cohesion	Properties identified as having ‘acquisition rights’ and their near neighbours and surrounding rural communities		Yes	N	
	Loss of community and displacement	Property owners, their families, friends, and remaining landholders/community		Yes	N	

PREDICTED NEGATIVE IMPACTS

UG = Updated Rating; CO = Current Operation; SM = Successful Mitigation

Impact category	Impact	Affected parties	UG	CO	SM	Mitigation Strategy	
Community (cont.)	Changing demo. and comm. tension	Residents of Muswellbrook, Aberdeen, Scone		Yes	N		
	Reduced social cohesion	Existing residents of Muswellbrook and other villages and towns enduring reduced social cohesion due to temporary workforce		Yes	N		
	Community tension and division	People who support mining or oppose mining. Additional: The communities of Muswellbrook, Singleton, Aberdeen and Scone		Yes	N		
	Community cohesion	Volunteer base community organisations and the people they provide services to. Additional: women are likely to be adversely impacted due to dominant male workforce			Yes	N	
	Family structure	New employees who have not worked a roster/ 12-hour shift before and their families. Additional: not only new employees; this is a continued impact for families of mine workers. Women likely adversely impacted			Yes	N	
	Equity impacts	Near neighbours, surrounding rural communities and residents of Muswellbrook and other villages and towns			Yes	N	
	Intergenerational equity	Current and future generations enduring intergenerational impacts due to changes to landscape. Additional impact cause: climate change			Yes	N	

PREDICTED NEGATIVE IMPACTS

UG = Updated Rating; CO = Current Operation; SM = Successful Mitigation

Impact category	Impact	Affected parties	UG	CO	SM	Mitigation Strategy
Community (cont.)	Gender equity	Partner of mine worker 'at home' – predominantly women – enduring increased workload at home and family responsibilities. Additional impact cause: loss of work, recreational opportunities and career progression		Yes	N	
Decision making system	Powerlessness	Near neighbours surrounding rural communities and residents of Muswellbrook		Yes	N	

It is particularly important to note the severe negative impacts on health and wellbeing, culture and community, which are closely interconnected to the negative environmental impacts (including dust, noise and visual impacts) that reduce the quality of the local environment, surroundings and landscape.

These impacts are interconnected, and their likelihood, severity, significance and consequence will follow a parallel degradation. If the Project is approved, the existing adverse impacts will continue or increase, with the individual impacts building into a severe cumulative social impact that will be difficult/impossible to mitigate and/or manage.

With the exception of **some trickle-down benefits** that may come from the VPA and the continued funding of ADCF, only MACH Energy, Mach Energy workforce and their families, suppliers for MACH Energy and their families, and some homeowners and investors will directly benefit from the project

The existing residents of Muswellbrook and, importantly, more vulnerable sections of the population, farmers, people in low-income households, and Aboriginal people in the mine's social locality, will carry the risks and endure the adverse impacts. **This is a significant concern that represent a highly likely social impact with potentially extreme consequences for local community.**

These concerns have not been taken into account in the Department's assessment report, nor in the draft recommended conditions.

CV in brief
Dr Hedda Haugen Askland
Hedda.Askland@newcastle.edu.au

FORMAL QUALIFICATIONS

- 2010** PhD (Sociology and Anthropology). The University of Newcastle (Award)
Thesis Title: *East Timorese in Melbourne: Community and Identity at a Time of Political Unrest in Timor-Leste*
- 2005** MSocSc (Sociology and Anthropology). The University of Newcastle
Thesis Title: *Young East Timorese in Australia: Becoming Part of a Culture and the Impact of Refugee Experience on Identity and Belonging*
- 2001** Candidata Magisterii. University of Bergen, Norway
Major: Social Anthropology

CURRENT EMPLOYMENT

Senior Lecturer (Anthropology), The University of Newcastle, NSW
Academic Group Leader: Cultures, Linguistics, Societies and Human Services Group

EMPLOYMENT HISTORY (last 10 years)

- 2014** Lecturer (Anthropology), School of Humanities and Social Science / UON, Callaghan
- 2013** Research Fellow (Level B), School of Architecture and Built Environment / UON, Callaghan
- 2011** Research Fellow (Level A), School of Architecture and Built Environment / UON, Callaghan
- 2010** Research Associate (HEW Level 6), School of Architecture and Built Environment / UON, Callaghan
- 2009** Research Assistant (HEW Level 5), School of Architecture and Built Environment / UON, Callaghan

SELECTED AWARDS AND FELLOWSHIPS

- 2021** CHSF Teaching Innovation Recognition
- 2020** UON Women in Research Fellow
- 2017** Faculty of Education and Arts Dean's Award for Collaboration Excellence
- 2017** Visiting Research Fellow at the Department of Social Anthropology, University of Oslo
- 2017** FEDUA Research Fellow
- 2016** Vice-Chancellor's Early Career Researcher and Innovation Excellence Award

GRANTS AND FUNDING

Total number of grants: 23 Total amount: AU\$1,214,669

Selected Grants

- 2022** Askland HH, Serval M, Mai N. *Mining voids and just transition: reimagining post-mining landscapes* - DP220100098. Australian Research Council (2022-2026) (Value: \$318,659)
- 2021** Askland HH, McDuie-Ra D, Mai N, Bunn M, Irwin R, Duffy M, Barry K, Boyd C. *Environmental humanities: resilience, affect, power and justice in the study of environmental change* (Value: \$14,877)
- 2020** Martínez Arranz A, Askland HH. *Enabling broader low-emissions advocacy coalitions in the NSW coal-related sectors* (2020-2021) (Value: \$418,828)
- 2019** Askland HH, Martínez Arranz A. *Enabling Broader Low-Carbon Coalitions: Digital Data Mining Methodology*. C21CH Small Grant. (Value: \$10,071)
- 2018** Faculty matching funding for UON PRC Scheme – Centre for 21st Century Humanities (Value: \$100,000)
- 2018** UON FEDUA Conference Travel Grant – Askland HH. Max Planck Institute for Social Anthropology Colloquium Fuelling the Future: Energy Resources and Environment, Halle, Germany (Value: \$1656)
- 2018** Centre for Resources Health and Safety (CRHS) Project Support Funds (Value \$2000) - Rich J, Askland HH, Chiong R, Lockart N, Maguire A. 'Modelling climate-change driven human displacement in the Hunter region of NSW: Developing key partnerships in preparation for an ARC Linkage grant'
- 2017** DVC-R Early Career Researcher Grant (Value AU\$50,000) – Askland HH, Chiong R, Lockart N, Maguire A, Rich J. 'Modelling climate change-driven human displacement in the Hunter region of NSW: An interdisciplinary assessment of risks and adaptation strategies' (Value: AU\$50,000)

- 2017 UON FEDUA Strategic Networks and Pilot Projects (SNaPP) Grant – **Askland HH**, Maynard J, Bush R, Larsen BR, White Z, Howard A, Blakemore T, Sobel-Read K, Stolk P, Grimstad S, Kohne M, Sherval M, Askew M. ‘Rural Land Use and Community Research Network’ (Value: AU\$13,700)
- 2017 Askew M, **Askland HH**, Blakemore T, Hayes A, Loxton D, et al. Research, Evaluation and Data (READ) Panel. Australian Government Department of Social Services (DSS).
- 2016 UON FEDUA Strategic Networks and Pilot Projects (SNaPP) Grant – **Askland HH**. ‘Eritalgia: mining and the disruption of future selves’ (Value: AU\$5,000)
- 2015 FEDUA New Staff Grant – **Askland HH**. ‘Land use, kinship and migration: large-scale resource extraction and the question of home’ (Value: AU\$4,981)
- 2015 NSW Department of Primary Industries – **Askland HH**, Askew M. ‘Small Holdings Project’ (Value: AU\$52,884)
- 2015 NSW Department of Primary Industries and UON – **Askland HH**, Askew M, Farrugia D, Sherval M, Coffey J, Threadgold S. ‘Local attitudes to changing land use – Narrabri Shire’ (Value: AU\$49,923)

PUBLICATIONS

Publications Merits

Total number of publications: 71

Citations (2022, total/last five years): 579/444

h-index (total/last five years): 13/11

i10 index (total/last five years): 16/12

Recognition:

2017-2018 Wiley Top Downloaded Article Recognition for paper recognised as a top 20 most read paper in the Australian Journal of Anthropology

2020 runner-up in the Environmental Sociology Best Paper Prize for the paper *Affect, risk and local politics of knowledge: changing land use in Narrabri, NSW*

Selected Publications

- Askland HH**, Shannon B, Chiong R, et al. 2022. Beyond migration: a critical review of climate change induced displacement. ENVIRONMENTAL SOCIOLOGY. DOI: [10.1080/23251042.2022.2042888](https://doi.org/10.1080/23251042.2022.2042888)
- Askland HH**. 2020. Mining voids: extraction and emotion at the Australian coal frontier. *Polar Record*. DOI: [10.1017/S0032247420000078](https://doi.org/10.1017/S0032247420000078)
- Askland, HH**. 2018. A dying village: mining and the experiential condition of displacement. THE EXTRACTIVE INDUSTRIES AND SOCIETY. Special Issue edited by D´Angelo, L. and Pijpers, R.J. Mining Temporalities: Extractive Industries and the Politics of Time, 5(2): 230-236. doi: <https://doi.org/10.1016/j.exis.2018.02.007>
- Askland HH**, Bunn M. 2018. Extractive inequalities: Coal, land acquisition and class in rural New South Wales, Australia. In A. Szolucha (Ed) ENERGY, RESOURCE EXTRACTION AND SOCIETY: IMPACTS AND CONTESTED FUTURES. London: Routledge, 20-36
- Askland, H. H.**, Bunn, M. 2018. Lived experiences of environmental change: Solastalgia, power and place. EMOTION, SPACE AND SOCIETY, 27, 16-22. doi:[10.1016/j.emospa.2018.02.003](https://doi.org/10.1016/j.emospa.2018.02.003)
- Askland, HH**. 2017. Overheating. An Anthropology of Accelerated Change. AUSTRALIAN JOURNAL OF ANTHROPOLOGY, 28(1), 126-128. doi: [10.1111/taja.12224](https://doi.org/10.1111/taja.12224)
- Duffy M, Boyd C, Barrie K, **Askland H**. 2021. Collective emotions and resilient regional communities. THE PALGRAVE ENCYCLOPEDIA OF URBAN AND REGIONAL FUTURES. DOI: [10.1007/978-3-030-51812-7_79-1](https://doi.org/10.1007/978-3-030-51812-7_79-1)
- Ramsay G, **Askland HH**. 2020. Displacement as condition: a refugee, a farmer and the teleology of life. ETHNOS 87:600-621. DOI: [10.1080/00141844.2020.1804971](https://doi.org/10.1080/00141844.2020.1804971)

SELECTED INVITED PRESENTATIONS

- 2019 Invited presentation and paper at the *Deexceptionalising Displacement? Precarity and Mobility Symposium*, University of Pittsburgh, USA, 21-23 March 2019
- 2018 Presentation at the 2018 Joint Institutes Colloquium, Max Planck Institute for Social Anthropology and the Institute for Social and Cultural Anthropology, Martin Luther University Halle-Wittenberg. ‘Living at the coal frontier: *eritalgia* and the loss of an anticipated future’, 12 June
- 2017 Presentation at the Workshop ‘The Coal Rush and Beyond: ‘Mined out: mining and displacement in rural New South Wales’. 13-14 November 2017, Institute for Advanced Sustainability Studies, Potsdam, Germany
- 2017 Seminar at the Department for Social Anthropology at the University of Oslo, Norway: ‘Wollar and Goliath: mining, movement and materiality’, 18 September 2017

- 2017** Seminar at the Department for Social Anthropology at the University of Bergen, Norway: 'An ethnography of loss: mining, conquest and time', 5 October 2017
- 2016** Presentation at the Hunter Valley Train Journey: 'Understanding the social impact of mining: eritalgia and the notion of lost future'. Invitation to give a presentation to local community members as part of a heritage train trip through the Hunter coalfields hosted by the Wollar Progress Association, Lock the Gate, 350.org and Nature Conservation Council, 28 August 2016.
- 2016** Interagency briefing to NSW Government: 'Local attitudes to changing land use: the Narrabri Shire'. Invitation to deliver a one-hour presentation of the findings and final report of the research project Local attitudes to changing land use: the Narrabri Shire to representatives from a cross-section of NSW Government departments involved in land use policy and planning. Sydney, 29 July 2016. Co-presenter: Michael Askew

SUPERVISION

Completed PhD: 8; Current RHD Supervision: 10; Completed Honours: 4

SELECTED LEADERSHIP ROLES

2021-Ongoing: Academic Group Leader: Cultures, Linguistics, Societies and Human Services Group, School of Humanities, Creative Industries and Social Sciences (HCISS), The University of Newcastle

2021- Ongoing: Research Lead for the UON Environmental Humanities Research Network

2020-2021: Cluster Leader: Societies, Cultures and Human Services (SACHS) Cluster, School of Humanities and Social Science (HASS), The University of Newcastle

2018-2020: Deputy Director, Centre of 21st Century Humanities (C21CH), The University of Newcastle

2018-2021: Project Director, Centre for Social Research and Regional Futures (CSRRF)

2018-2020: Honours Convenor (Sociology/Anthropology/Human Services), School of Humanities and Social Science, The University of Newcastle

2016-2017: Bachelor of Arts Working Group Member, School of Humanities and Social Science, The University of Newcastle

2016-2017, 2018 (ongoing): School of Humanities and Social Science Representative in the Faculty of Education and Arts Teaching and Learning Committee, The University of Newcastle

2016-ongoing: Australian Anthropological Society Institutional Representative

PEER REVIEWER

Energy Research and Social Science; The Extractive Industries and Society; International Journal of Social Welfare; American Anthropologist; Geographical Research; Emotions Space and Society, Journal of Royal Anthropological Institute; Oceania; Rural Society; Society and Nature; The Australian Journal of Anthropology

SELECTED MEMBERSHIPS

2022-Ongoing: HCISS Research Portfolio Working Party, UON

2018-2020: Centre for 21st Century Humanities (C21CH), UON

2017-ongoing: Resource Extraction and Sustainable Arctic Communities REXSAC – A Nordic Centre of Excellence

2017-ongoing: Society for Applied Anthropology (SfAA)

2016-ongoing: European Association of Social Anthropologists (EASA)

2016-ongoing: EASA Anthropology of Mining Network

2016-ongoing: CRHS Environment and Health Working Group, ICBLU/NIER, UON

2016-ongoing: Newcastle Institute for Energy and Resources (NIER) Research Leaders Group, UON

2015-ongoing: Centre for Social Research and Regional Futures (CSRRF), UON

2009-2014: Centre for Interdisciplinary Built Environment Research (CIBER), UON

2005-ongoing: Australian Anthropological Society (AAS)

OTHER

2022: Expert Advisor to the Social Impact Assessment Planning Group, Department of Planning and Environment, NSW Government

2018: Expert Witness, NSW Land and Environment Court, Social Impact Assessment, Rocky Hill Coal Mine

2017: Expert Witness, Environmental Defenders Office, Social Impact Assessment, Bylong Coal Project

2016-ongoing: Australian Anthropological Society (AAS) Institutional Representative for UON

2016-2021: Editor, EASA Anthropology of Mining Newsletter

2016-2017: Advisor to the New South Wales Department of Planning and Environment on the Social Impact Assessment Guidelines for State Significant Resource Projects