

Social licence to operate through mine closure transition: lessons from theory and practice

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Abstract

Effective and meaningful participation in the mine closure planning process is a commonly prescribed goal of leading industry best practice guidance. The expected outcome is a social licence to operate for the companies, sustainable regions for governments and lasting legacies for communities. However, the extent to which this objective translates into practice is not well understood conceptually or empirically. In this paper, we draw on both literature and project experience to outline conceptual factors that are understood to contribute to a social licence to operate during mine closure processes. Specifically, we outline how social impact assessment (SIA) can be used as a practical tool to assist mine companies achieve and maintain what we term a ‘social licence to close’ during mine closure processes and provide examples of the application of SIA in successful closure planning programs. We argue that systematic and research-driven consultation and collaboration with stakeholders, anchored within the SIA process, is a powerful tool to gain trust, understand impacts of closure specific to each stakeholder group and develop meaningful and effective measures for transition to a post-mining future. This paper will be of interest to industry practitioners seeking to optimise their closure efforts from a social performance perspective.

Keywords: *mine closure, social licence to operate, social impact assessment, stakeholder engagement*

1 Introduction

The resources sector is a major driver of changing social dynamics and conditions in rural and regional communities in Australia (Everingham 2016; Petrova & Marinova 2013). The establishment and operation of new mines is commonly accompanied by rapid development and many socio-economic transformations for local communities, including population growth, direct employment, increased business opportunities and changing community identities (Morrison et al. 2012). At the same time, the decommissioning and closure of mines can have equally significant socio-economic changes and consequences for communities if not managed properly, particularly those which have become dependent on development projects to support regional economic stability and growth (Cheshire et al. 2011). The process of mine closure is therefore not solely a ‘technical-engineering’ activity (Bainton & Holcombe 2018, p. 469), but rather must be understood as both a discrete event and long-term ‘social’ transition process in the lives of individuals, families, communities, governments and other key stakeholders (Chaloping-March 2008).

Accordingly, planning for the social closure of mines and transition of communities has become a growing priority for the industry (International Council on Mining and Metals [ICMM] 2019). This is evidenced by the EY annual survey of *Top 10 Business Risks and Opportunities for Mining and Metals in 2022* where environmental, social and governance factors topped the list as the number one critical risk facing senior mining executives in 2022 (EY 2021). In particular, the report highlights that many mining operations are struggling to “navigate different political, social requirements, as well as what’s best for communities in terms of leaving a legacy beyond life of mine” (EY 2021, p. 5). This is not surprising given that, unlike environmental closure processes, there is a lacuna of regulation and standards for managing the social aspects of mine closure (Vivoda et al. 2019). Notwithstanding this regulatory absence, emerging industry best practice suggests effective closure plan implementation is critical given that the way a company manages the closure

planning process can positively or negatively impact its reputation, as well as its broader ‘social licence to operate’ (ICMM 2019, p. 32).

However, if a social licence to operate refers to an ‘unwritten’ ongoing acceptance of a mining development by key stakeholders (Prno & Slocombe 2012), what then constitutes a social licence during the decommissioning and mine closure phase? Equally important, what are the underlying processes and tools that can assist companies in obtaining one during this phase? To date, questions regarding how a social licence to operate in mining is granted and maintained within academic literature have been focused on the commissioning and operational phases of resource development (notably, coal seam gas in the context of Australia) (see Gillespie et al. 2016; Moffat & Zhang 2014), with the application of this concept in the context of mine closure planning less well understood. This absence persists despite a growing body of influential research that advances a new research agenda focused on the ‘social aspects of mine closure’ (Owen & Kemp 2018).

This paper seeks to respond to the industry challenges raised above by examining the links between social licence and mine closure processes. Drawing on existing literature, we outline conceptual factors that are understood to contribute to a social licence to operate. Against this background, we draw on our practical experience as social planning practitioners to highlight the application of these factors during the mine closure planning processes and suggest additional variables that are of critical relevance to obtaining a social licence to operate during this phase. We then outline the relevance of social impact assessment (SIA) as a practical tool to assist mine companies achieve and maintain what we term a ‘social licence to close’ during mine closure processes and provide examples of the application of SIA in successful closure planning programs.

2 What factors underpin a social licence to operate?

Social licence to operate is a concept that has gained widespread traction in the global mining and extractive industry, emerging in the 1990s in response to public pressure for the industry to increase its social accountability (Gunningham et al. 2004). Although definitions vary, the concept is commonly understood to refer to the “ongoing acceptance and approval of a project by local community members and other stakeholders that can affect its profitability” (Moffat & Zhang 2014, p. 61). Increasing adoption of the term by industry has naturally been accompanied by a growing body of academic interest in the topic. On the one hand, some scholars view social licence critically and argue industry’s application of the term is a way to manage community opposition to development or silence the existence of conflict or tensions (Owen & Kemp 2013). They argue its inflated and uncritical application leads to decision-making systems that reproduce rather than transform existing uneven power relations between companies and impacted stakeholders and communities (Owen & Kemp 2013; Wilson et al. 2018).

Other scholars have a more appreciative read of the concept and see social licence to operate as being valuable for extending the industry’s focus from technical imperatives of mining to also include social and community considerations. In this vein, they have sought to interrogate the concept by seeking to understand what constitutes a social licence and the processes necessary for obtaining one in practice. This has led some studies to describe social licence as an intangible concept that is difficult to measure overall (Prno & Slocombe 2012). Others, however, have discerned that meaningful, constructive relationships between companies and stakeholders are of central importance for establishing or maintaining a social licence to operate (Mercer-Mapstone et al. 2018; Moffat et al. 2016). In their influential theoretical work on social licence to operate, Moffat & Zhang (2014) propose that these relations must be underpinned by trust, which they suggest is shaped by three important factors:

1. The extent to which a company manages and mitigates impacts of its operations.
2. The way a company engages with communities (i.e. the quantity and quality of this contact).
3. The extent to which community members perceive that they have had a reasonable voice in a company’s decision-making process (i.e. procedural fairness).

Overall, their research highlights the importance of fair treatment and high-quality engagement by companies with communities, alongside the mitigation of operational impacts, in securing and holding a social licence to operate (Moffat et al. 2016). This model is supported by other similar studies (Thomson & Boutilier 2011), suggesting that social licence is maintained by companies that are responsive to the changing concerns and expectations of stakeholders, and that focus on the risks their operations pose to local communities as opposed to risks to projects from communities (Kemp et al. 2016; Kemp & Owen 2019). We support this more constructive approach to social licence to operate and now turn to its application in the context of mine closure.

3 What does social licence to operate look like during mine closure?

As highlighted in the introduction, much research focused on developing a social licence to operate relates primarily to earlier stages of the resource project lifecycle. This is not surprising given that growing interest in the concept in Australia has emerged in response to the development of the unconventional gas industry, which has been the subject of significant social opposition in the pre-approval phase (Lacey & Lamont 2014; Luke 2017; Walton & McCrea 2020). If conceptual understanding of the underlying processes to obtain social acceptance of mine closure activities is generally absent from academic studies, some insights can be observed from the growing body of industry guidance and research on managing the social dimensions of mine closure. From our review, there are several foundational principles that prevail.

First, best practice overall highlights that mine closure practice is a “process, not a point in time” (Keenan 2020, p. 4) and requires early and ongoing consideration of the social aspects of closure throughout the life-of-mine (ICMM 2019). This should be supported by the following (Everingham et al. 2020; ICMM 2019; Owen & Kemp 2018; Weller et al. 2020):

- Consistent and transparent engagement and information sharing with stakeholders about the risks and impacts of closure preparation activities and anticipated milestones to relinquishment.
- Providing people impacted by mine closure decisions and activities with an opportunity to have a say in those decisions and activities.
- Working collaboratively with local community and stakeholders to identify and work towards a realistic vision and goals for the post-closure period, with opportunities for lasting benefits being recognised and planned for early and adequately.
- Retaining accountability for impacts and risks pertaining to mine closure both now and in the future through an ongoing process of monitoring and evaluation.

Ultimately, the principles above speak to the dimensions of ‘quality and quantity of contact’ and ‘procedural justice’ described in Moffat & Zhang’s (2014) conceptualisation of social licence to operate. That is, while it is inevitable local community members will experience a certain level of socio-economic change during mine closure processes, genuine engagement, participation and collaborative approaches to the development of strategies to mitigate these impacts will likely create greater community acceptance in the long-term of mine closure. These principles also illustrate that money and donations during mine closure processes is not enough itself to ‘buy’ a community’s acceptance (Zandvliet & Anderson 2009). Instead, it requires concerted effort from companies to listen to and understand the voices of potentially impacted people, and then publicly act on what is heard (Boele 2018).

4 How can SIA practice help gain a ‘social licence to close’?

From our review above, we suggest the variables of participation, open dialogue, transparency, accountability, and distributive justice are integral to obtaining a social licence during the closure phase of mining operations. The overall implication of this understanding is that for any mining company that is truly committed to maintaining ‘trust’ with communities during the mine closure process, the question you need to be asking then is not ‘how will mine closure impact our businesses?’, but rather ‘how will mine closure

impact people and our stakeholders?’ Answering this question is not a straightforward exercise and calls for expert social performance capability and qualitative and quantitative research (Owen & Kemp 2018).

In our experience, SIA is a useful analytical tool and research process that can assist social planning for mine closure and contribute to a company’s ongoing development of good working relationships and trust with stakeholders. Briefly, SIA is the process of identifying, assessing, managing and monitoring social, cultural and economic impacts (positive and negative) of a planned change or intervention (Vanclay 2003). Its broader purpose is to bring about more sustainable and equitable development (Esteves et al. 2012). In the context of mine closure, it can provide strategic insight into the likely impacts of the completion of mining on local communities and assist in identifying strategies for mitigating these impacts and maximising long-term development outcomes. In the section below, we outline how SIA can be used as a tool to bring a people-focused lens to mine closure planning and contribute to building trust with communities, leading to what we posit as a ‘social licence to close’.

4.1 A structured, strategic approach based on a solid knowledge base

From our practical experience, mining companies want to do the right thing, but simply don’t know where to start when it comes to managing social impacts associated with mine closure. One of the most effective and simple ways to start the momentum rolling in planning and preparing for addressing the social dimensions of mine closure is through the completion of ‘closure-specific’ SIA study at an early stage in the life of the mine, with the outcomes of the assessment used to inform site-wide closure planning activities. A closure-specific SIA provides the opportunity for a company to:

- Take stock of the existing socio-economic conditions of a community, including the degree of dependency among various stakeholders in a community on the mine for their wellbeing and livelihoods, as well as understanding local context and values.
- Establish an early understanding of the likely socio-economic impacts and opportunities of mine closure on a local community based on these existing conditions, including how different groups within a community may be differentially affected.
- Map out appropriate management strategies and desirable long-term outcomes based on a thorough understanding of the social risks and opportunities mine closure activities pose to communities.

In terms of process, SIA provides companies with a structured, evidence-driven approach to understanding and mapping out their responsibilities and actions for managing the social aspects of closure. The point to emphasise here is that while the process of SIA or impact assessment in general is not necessarily new to mining, undertaking proactive SIA studies early in the mine life process can add significant value internally by providing opportunity to fully understand complex social issues and contexts, and to pre-empt and address substantive impacts before they occur, as opposed to addressing such impacts in a reactive “fire-fighting manner” immediately prior to cessation of operation (Kemp & Owen 2019, p. 2). When SIAs are undertaken at the “eleventh hour” (Lamb & Coakes 2012, p. 627), the limited lead time often means companies are less able to work effectively with communities to develop the capacity necessary to mitigate identified impacts or maximise the value of proposed post-mining projects. Robustly undertaken SIAs by appropriately qualified specialists can help bring strategic, long-term focus to a company’s closure planning process.

4.2 Building trust through targeted consultation and participation

Additionally, SIA can provide a vehicle for furthering the existing relationships between companies and communities. Because SIA involves the forward projection of impacts based on the collection of quantitative and qualitative knowledge, consultation with potentially affected groups in communities and stakeholders is a core element of the SIA process. The purpose of this consultation is fundamentally to understand stakeholders’ concerns, aspirations, and what they see as the impacts and opportunities presented by mine closure, as well as their preferred strategies and actions to ensure management of these issues, and deliver

a viable post-mining future (Everingham et al. 2020). The value of SIA-focused consultation is that it results in a more rigorous impact assessment, as the identification of impacts and opportunities is informed through local knowledge, while also allowing management measures to be targeted and responsive to the issues and needs of each stakeholder group. Obtaining the unique experience and differing views of stakeholders can additionally help identify issues that may not have been yet recognised by a company's own internal social performance processes and systems.

However, beyond providing value to the assessment process itself, SIA-driven consultation provides an invaluable opportunity to start a dialogue with communities and stakeholders about the topic of closure itself. From our experience, talking about closure can be confronting and upsetting for community members, particularly those who are dependent on the mine in some way. In some cases, it can be the first time communities have heard about the issue, or, in other cases, closure has been on the cards for many years and the community has developed cynicism because of repeated expansions or extension. In these cases, the opportunity to discuss what is a difficult but unavoidable process and provide input into the mine's decision-making process with respect to closure activities is well received by stakeholders as it provides them a sense of ownership in the closure process, as well as avoids frustration and consultation fatigue among stakeholders. This sense of ownership, in turn, engenders a sense of fairness and competence in a company's mine closure process, factors which increase trust, and which we see as integral to gaining a 'social licence' during the closure phase. Furthermore, in our experience, we have noted that closure-related consultation processes driven without a SIA-based foundation can lead to fatigue due to quantity-based interactions, where poor analysis of the information shared by stakeholders leads to frustration as it is not suitably used to inform the closure planning process.

4.3 Developing meaningful outcomes

As seen in Section 3, one of the core principles of best practice with respect to managing the social dimensions of mine closure involves companies supporting the goal of delivering a positive legacy post-closure. From our experience, we have seen instances where a company's understanding of post-mining legacy is overly centred on the development of statues and museums to celebrate the contribution of the industry to the company and community. We acknowledge the good intentions behind many of these initiatives and recognise they have a role to play in assisting to manage changes to community identity and resilience. However, for companies looking to develop a social licence for closure, it is important that legacy efforts are strategically driven and purposeful to fulfil sustainable development obligations. A SIA can assist the identification of opportunities and investment initiatives that respond to community needs and support socio-economic transition, and ultimately help steer away from an approach focused on short-term company promotion or self-interest (Kemp & Owen 2019). Such focus aligns with the understanding that 'how' mining companies manage impacts and assist communities to manage socio-economic change is a key driver of a social licence during the closure phase. It is important to note here that the concept of a positive legacy can mean different things to different stakeholders. Again, SIA can help address this challenge by identifying these differences in priorities and values within communities and help companies target their social legacy planning accordingly.

4.4 Facilitating collaboration

Many of the potential socio-economic impacts and opportunities associated with mine closure are inherently complex, and there is no one party who holds entire responsibility for managing these alone (Morrison et al. 2012). Rather, developing effective management strategies to address the social dimensions of mine closure is a collaborative effort (ICMM 2019). While the mining company might be the lead organiser and coordinator in terms of the identification of strategies, collaboration and information sharing among all parties, it is essential to ensure that the strategies are appropriate for the communities and stakeholders, there is a sense of joint ownership and that they are implemented in a timely manner. The consultation process undertaken as part of SIA studies can therefore serve as a foundation to initiate these collaborative relations and assist stakeholders to start to build their own understanding of what actions they need to

undertake to prepare for anticipated changes and adapt their own capacity, assets, and strengths to respond to mine closure. These actions, in turn, can be identified within the SIA to clearly document that there is shared responsibility for outcomes and the actions all parties need to undertake to unlock this potential. In our experience, the clear identification and documentation of approaches for the management of identified impacts and opportunities can provide significant clarity to stakeholders and reduce (to a certain extent) some of the uncertainty they may feel about the implications of mine closure, as well as help reduce fear that a company would simply “cut and run’ overnight” (Keenan 2020, p. 8).

4.5 Applied social performance expertise

Finally, mine closure planning and related impact assessment studies and engagement activities are sensitive and extremely purpose driven. Accordingly, you need to have the right qualified people to run this process. From our experience, a lack of social performance capacity in undertaking these activities can lead to these efforts ‘falling flat on their face’, as there is a failure to understand the complexity or significance of socio-economic issues associated with mine closure. Equally, there is often a misconception within the mining industry that the only prerequisite for social performance and engagement activities is to be inherently good at talking with people. This can lead to cynicism and the development of mistrust within communities, who feel they tell companies the ‘same thing over and over’ but never see any tangible change or the outcomes of their feedback. Rather, good social planning and decision-making for mine closure involves strategic research design, data collection, analysis, modelling, and effective communication and reporting, in addition to engagement itself (Kemp & Owen 2019). Such skills are critical to succinctly capture and articulate back to communities how their input has been heard and acted on by companies – a final critical element for any company seeking to develop a ‘social licence to close’.

5 Conclusion and future directions

Through this paper, we have deliberated on the concept of ‘social licence’ and that a ‘social licence to close’ is equally important but less conceptually understood than the social licence to operate. We argue that a systematic and research-driven consultation and collaboration with stakeholders, anchored within the SIA process, is a powerful tool to gain trust, understand impacts of closure specific to each stakeholder group and develop meaningful and effective measures for transition to a post-mining future.

A key issue alluded to, but not the focus of this paper, relates to the potential shortfalls associated with the concept of a ‘social licence’. Moving forward and considering the potential social impacts to communities associated with mine closure, we suggest further research be undertaken to uncover such shortfalls in the context of mine closure and identify recommendations on how they might be addressed. Accompanying this could be an examination into the potential weaknesses in the application of SIA during mine closure. These findings would serve to develop a more complete picture of the extent to which mining companies can truly operationalise a ‘social licence to close’ agenda focused on collaborative and sustainable development outcomes with key stakeholders and communities.

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