

MONITORING THE IMPACT OF MINING ON LOCAL COMMUNITIES: A HUNTER VALLEY CASE STUDY¹



David Brereton

Director

Centre for Social Responsibility in Mining, University of Queensland

Peter Forbes

Safety Health Environment and Community Manager
Anglo Coal (Drayton Management) Pty Ltd

CSRM is part of the Sustainable Minerals Institute (SMI)
a multidisciplinary research institute at the University of Queensland.

www.csrn.uq.edu.au

¹ Paper presented to Minerals Council of Australia Inaugural Sustainable Development Conference, Melbourne, October 2004.

TABLE OF CONTENTS

Introduction	3
Project Background	3
The Broader Context	3
About Drayton Mine	5
About Muswellbrook	6
Engaging with Local Stakeholders: Processes and Outcomes.....	8
The Interviews	8
The Workshop	10
Concluding Observations.....	12
Summary of Key Themes	12
Next Steps.....	13
Conclusion.....	14
Acknowledgement	14
References	14

INTRODUCTION

This paper reports on a current research collaboration between the University of Queensland's Centre for Social Responsibility in Mining (CSRSM) and Anglo Coal's Drayton operation in the Upper Hunter Valley of New South Wales. The project is being funded by the Australian Coal Association Research Program (ACARP), with cash and in-kind support from Anglo Coal. A key project aim is to assist Drayton enhance its strategies for monitoring and managing the impact of its activities on the local community. There has been extensive stakeholder engagement around these issues, including a multi-stakeholder workshop in August of this year. Learnings from the project will also be used to inform the development of advisory materials for wider use in the mining industry.

The paper first provides the context to the project and presents some background material on Drayton Mine and the Muswellbrook area. It then describes how the stakeholder engagement process was managed and analyses the findings from this exercise. The final section briefly reports on the current status of the project and outlines expected outcomes.

PROJECT BACKGROUND

THE BROADER CONTEXT

Historically, most Australian mining operations have assigned a lower priority to the management of community impacts than to workplace health and safety, and environmental performance. Issues associated with community impacts have mainly been addressed at the project approval stage, when environmental and social impact assessments are being prepared. With the exception of environmental amenity issues (noise, dust, air quality, etc) sites have typically devoted few resources to monitoring and managing, in an ongoing way, the impacts of their operations on surrounding communities.

Recently, this balance has begun to shift as ideas about corporate social responsibility and sustainable development have gathered strength within the minerals industry. At the global and national level, leading mining companies have now formally embraced the paradigms of sustainable development, corporate social responsibility and 'triple bottom line' reporting. Each of these paradigms defines the community obligations of companies quite broadly and stresses the need to improve social, as well as environmental performance. For example, the International Council of Mines and Metals (ICMM) sustainable development framework includes an undertaking by signatories to '*contribute to the social, economic and institutional development of the communities in which we operate*' (ICMM 2003). In a similar vein, the World Coal Institute, in its submission to the 2002 'Rio Plus 10 Earth Summit' in Johannesburg, stated that a key 'action area' for the industry is to make a more effective

[†] A study of the cumulative impacts of industrial activity on the Upper Hunter region was published by the New South Wales Department of Urban Affairs and Planning in 1997. While this report is a useful resource much of the data reported in it is now out-of-date. Another limitation is that the report does not clearly distinguish between impacts due to mining and those attributable to other industries

contribution to the social and economic development of local communities' (World Coal Institute 2001). A growing number of mining companies are also endeavouring to align their reporting practices to the Global Reporting Initiative (GRI) framework, where practical. One of the requirements of the GRI is that companies should provide a:

description of policies to manage impacts on communities in areas affected by activities, as well as description of procedures/programmes to address this issue, including monitoring systems and results of monitoring.

Several companies now require all of their sites to formulate community plans and to update these regularly. Some companies have also developed toolkits, guidelines and audit protocols to support this process (such as Anglo American's Socio Economic Assessment Toolbox, referred to below). In parallel, most of the larger companies now publish reports that include some social performance information (albeit often presented in a fairly rudimentary form). Increasingly, these reports are being prepared for individual sites, as well as business units and companies. There has also been a marked growth in the number of people employed in the industry who are involved, in some way, in managing interactions between sites and their local communities.

At all levels, the industry is becoming more attuned to the importance of maintaining a mine's social – as distinct from its' legal – licence to operate. It is now generally accepted that if a mining operation is in conflict with significant sections of the local community this will create difficulties with regulators, generate negative publicity and make it more difficult to get new projects approved.

While these developments represent a significant shift of focus within the industry, translating broad policy commitments into improved practices 'on the ground' remains a major challenge. Individual sites vary considerably in the extent to which they see community issues as important and in their willingness to engage with communities about these issues. Even where sites are committed to improving their social performance, they may be constrained by a lack of resources, and expertise. One of the challenges for sites is that community impacts and issues can vary markedly depending on where a mine is located, its history and so on. This limits the scope to apply standard methodologies and to transfer learnings from one site to another, and requires sites to put considerable effort into engaging with and understanding their communities.

It is against this background that in 2003 Australian Coal Association Research Projects (ACARP) called for project proposals on the theme of 'Mining and the Community' and, in particular, 'the development of improved methods to quantify and ameliorate the effects of coal mining on neighboring communities'. This was a significant shift in emphasis on the part of ACARP, which has traditionally directed funding almost exclusively to projects that address technical, environmental, and health and safety issues.

Of the various community-focused project proposals that were submitted to ACARP for consideration, two were successful in securing funding: the project reported on here, which is being undertaken by the CSRSM, and a related study being conducted in the Bowen Basin by researchers based at Central Queensland University (CQU). The CSRSM project runs for 12 months and the CQU project for two years. A proposal is currently before ACARP for the CSRSM to undertake a follow-on study in 2005 addressing the cumulative impacts of multiple mining operations on the community of Muswellbrook.

Drayton was selected as the case study for the CSRSM study for three main reasons: (i) ACARP indicated that it wanted the research to be conducted in the Hunter Valley; (ii) Anglo Coal (the owner of the Drayton operation) was prepared to provide financial and in-kind assistance for the project; and (iii) site management was willing to be involved. For Anglo Coal, and Drayton in particular, a benefit of participating in the study was that the outcomes could be incorporated into a broader Socio-Economic Impact Assessment that all Anglo American sites are now expected to undertake (see below).

ABOUT DRAYTON MINE

Drayton is an open cut coal mine located approximately 13km south of the town of Muswellbrook, in the Upper Hunter Valley of New South Wales (see Figure 1). The mine commenced operations in 1983 and is due for closure between 2010 and 2015. Drayton currently has 224 employees and 48 full-time contractors. In 2003 the mine produced 4.86 million tonnes of steaming coal for the domestic and export markets.

Drayton shares a boundary with BHP Billiton's Mt Arthur Coal operation. There are several small rural holdings within a few kilometres of the mine, including some that abut the lease. Coal is transported by a system of conveyors to nearby power stations and by rail to the Port of Newcastle.

Management of community relations is part of the portfolio of responsibilities of the Safety, Health, Environment and Community (SHEC) Manager. The site also employs an Environmental Coordinator who has much of the day-to-day responsibility for dealing with complaints and other community relations activities.

Drayton has had a Community Consultative Committee (CCC) since 1994. Each mine in the region is now required to establish a CCC as a condition of its Development Approval, although the Drayton CCC was established before this requirement took effect. The CCC is comprised of Drayton's General Manager, SHEC Manager, Environment Coordinator, two elected local councillors and four local community members. Community positions are filled by advertising, but it has been difficult at times to generate interest and one of the positions is currently vacant. The committee meets on a quarterly basis and also holds twice yearly joint meetings with the CCC for the neighbouring Mt Arthur Mine. The primary focus of the CCC is on environmental management issues associated with the mine.

Drayton has produced a site-specific HSEC report in each of the last two calendar years. This is distributed to 'near neighbours' and other interested parties, and also forms part of the main Anglo Coal SHEC report. In addition to presenting environmental and health safety data and providing short case studies, the SHEC report contains basic statistical data on employment (total numbers, number of trainees and apprentices) complaints and inquiries, community engagement activities, and community donations.

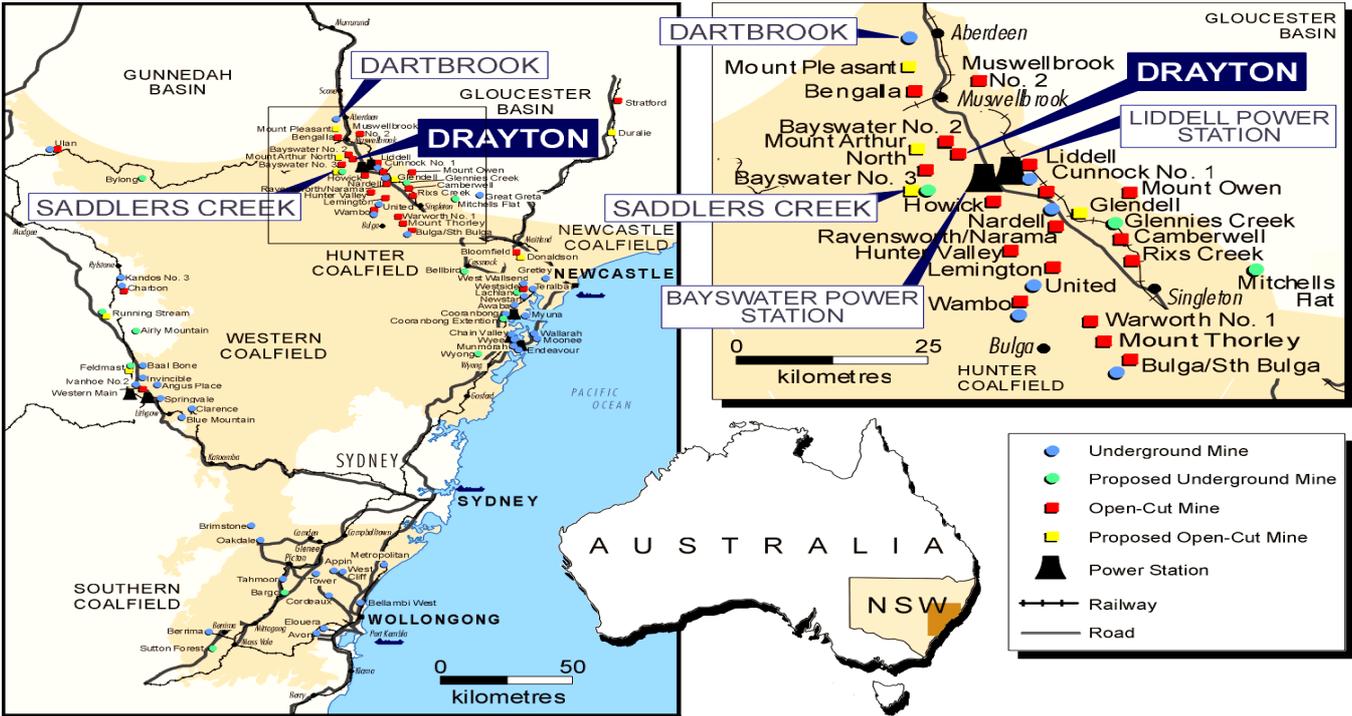
Drayton, in common with other mines in New South Wales, is also required to produce an annual, stand-alone, Environment Report to the State Government. The bulk of this report is given over to the presentation of detailed environmental monitoring data, but it also contains information about the local government areas in which employees reside, community liaison activities, details of public complaints and enquiries, and community contributions.

Drayton and other Anglo Coal operations are subject to the corporate policies and reporting requirements of Anglo American, the parent company. Anglo American’s statement of business principles includes the following undertaking:

We aim to promote strong relationships with, and enhance the capacities of, the communities of which we are a part. We will seek regular engagement about issues which may affect them. Our support for community projects will reflect the priorities of local people, sustainability and cost effectiveness. We will increasingly seek to assess the contribution our operations make to local social and economic development and to report -upon it.

As noted above, Anglo American has mandated that all of its sites are to conduct a comprehensive Socio Economic Assessment, using a ‘toolbox’ that has been developed by an external consulting organisation specifically for that purpose. The toolbox is designed to ‘assist Anglo operations to identify and manage their social and economic activities (both positive and negative)...[and] also provides guidance on how to improve overall social performance where this is necessary’. The work being undertaken for the current project will contribute to this broader assessment.

Figure 1: Location of Drayton Mine



ABOUT MUSWELLBROOK

Drayton is one of five mines – four open cut and one underground – that operate wholly in Muswellbrook Shire. Two other open cut mines have their leases partly in the Shire. In addition, two large coal-fired power stations (Bayswater and Liddell) are located in the area.

Including Drayton, there are four open cut operations within a few kilometres of the township of Muswellbrook. The workings of two of these operations – Bengalla (jointly owned by Rio Tinto Coal and Wesfarmers) and BHP Billiton’s Mt Arthur operation –are clearly visible from the town itself. Further mining expansion is likely in the near future, with Rio Tinto Coal having obtained regulatory approval to establish a new mine at Mt Pleasant, adjoining the current Bengalla operation.

The town of Muswellbrook has a population of around 10,000 people, with another 4,700 people living elsewhere in the Shire. Around 3.6 per cent of the Shire population self identifies as Indigenous, compared to the New South Wales average of 2 per cent (Hunter Valley Research Foundation, 2003, p.33). Population growth in the Shire has been gradual, averaging 0.6% p.a. between 1991 and 2001 (Hunter Valley Research Foundation, 2003, p.18). The Hunter Valley Research Foundation predicts that the Shire’s population will fall over the next two decades.

Muswellbrook was traditionally a rural-based economy, but power generation, mining and mining-related businesses are now major industries. According to the 2001 census 10 per cent of the employed workforce in Muswellbrook Shire works in black coal mining and another five per cent in electricity supply. By comparison the rural sector (wine production and horse, beef cattle and dairy farming) accounts for around 10.5 per cent of direct employment (Hunter Valley Research Foundation, 2003, p.61). Muswellbrook has a comparatively high proportion of people in the workforce who earn \$1500 or more weekly (6.5 % compared to the Hunter region average of 2.8 %) which reflects the presence of a substantial mining workforce (Hunter Valley Research Foundation, 2003, p.297).

The high concentration of mining activity in the region – and the close proximity of some mines to the town of Muswellbrook – has ensured that environmental amenity issues (noise, blasting disturbance, dust, visual impacts etc.) are high on the local agenda. There is much discussion locally about the perceived ‘cumulative impacts’ of mining on the environment and the need for data to be collected about the extent and nature of these impacts.[‡] There is also growing attention being paid to the potential social, environmental and economic implications of mine closure and the need to develop a post-mining economic base.

The Muswellbrook Shire Council is actively involved with the mining sector at a number of levels. Under New South Wales legislation, the Council plays a significant role in assessing development applications for new mines and extensions of existing operations. The Council has also used its planning powers to negotiate infrastructure contributions from new mining projects and has worked with the industry to establish a fund for purchasing properties that have been adversely affected by new mining developments. A further Council initiative has been the formation of the Muswellbrook Mine Managers forum. This is a regular meeting between the Council and the General Managers of all the coal mines in the Shire. The forum was established in 2001 with the stated aim of working together for the benefit of the overall community. The forum has worked on a range of projects affecting the Shire, including community consultation committees, coal discussion days, and complaint processes as well as apprenticeships and education in coal mining. Increasingly, discussions are focusing on sustainable development issues post-mining.

ENGAGING WITH LOCAL STAKEHOLDERS: PROCESSES AND OUTCOMES

The project commenced early in 2004 with meetings on site with relevant Drayton and Anglo Coal personnel. In these initial meetings, the focus was on clarifying what information the site already collected, identifying key local stakeholders and refining the consultation strategies to be employed.

In line with the original proposal to ACARP, it was agreed that the CSRSM would conduct the consultations in two stages: an initial round of one-on-one interviews with community representatives and other stakeholders, followed by a facilitated workshop involving a range of stakeholders. The following two sections describe how these activities were conducted and summarises the outcomes.

THE INTERVIEWS

The interviews were designed to obtain the views of a broad cross-section of groups and organisations in the community about the impacts of mining, plus their perceptions of how Drayton and other mines were managing these impacts. Potential interviewees were identified on the basis of advice from Drayton personnel and other key informants (eg. from within local government and the Chamber of Commerce) and through 'snow ball sampling'.[§] Although we were told on several occasions that the local community had been 'over consulted', most people who were contacted were willing to participate in the study and welcomed the opportunity to express their views.

A total of 28 interviews were conducted, covering the following sectors: near neighbours, regulators, MineWatch (a local community advocacy organisation), Indigenous organisations, local government representatives, local business, education (secondary and TAFE), health, community development and other land users (wine, dairy, cattle grazing, equine).

Tables A1 and A2 (see appendices) summarise what representatives of these diverse groups identified as the main positive and negative aspects of the local mining industry. In terms of positives, most interviewees agreed that mining had brought long term economic benefits to the area, increased employment opportunities (both directly and in supporting industries) broadened the local skills base and contributed directly and indirectly to improved infrastructure, facilities and services (see Table 1). On the negative side, it was generally perceived that there had been some adverse environmental impacts, although there were divergent views as to the nature and magnitude of these impacts. Other commonly voiced concerns were that:

- the community had become overly dependent on mining, making it vulnerable to changes in the fortunes of the industry
- a social and income divide had developed between mining and non mining families

[§] 'Snowball sampling' is simply a process whereby interviewees are asked to identify other people who they consider should be approached for an interview

- the mines, because of the high wages they pay, had contributed to a shortage of skilled tradesmen in the area
- insufficient employment and training opportunities were being provided by the industry, particularly for young people.

Two groups who were particularly critical of the industry were ‘near neighbours’ who considered that not enough had been done to address their particular environmental concerns, and local Indigenous groups, who perceived that Aboriginal people had obtained few economic benefits from mining.

When asked if mining had been good or bad for Muswellbrook *overall*, more than three quarters of the interviewees gave a positive response. A similar proportion agreed that mining was central to the future of the community of Muswellbrook.

Around 75 per cent agreed that the local mines are responsive to concerns raised by the community, although several interviewees indicated that this was mainly due to the regulatory requirements that govern mines. For example, one said that: ‘the process to get mine approval means they have to respond formally ... its not about them being willing, they’re obliged’.

As shown in Table 1, nearly three quarters of respondents considered that the community did not trust the mines. This was seen as an issue for the industry in general, rather than specific to particular mines.

As Table 1 also shows, a substantial proportion of interviewees agreed that some mines in the Muswellbrook area are more responsive than others, are better environmental performers than others and contribute more to the community. Again, though, differences in performance were often attributed to stricter regulatory requirements rather than to anything that the mines themselves had done voluntarily. The majority of participants said that they did not have the knowledge to rank Drayton’s performance relative to other mines. However, those who did comment typically indicated that Drayton was either ‘average’ or ‘above average’.

Table 1 – Perceptions on Mine-Community Relations

Question	Yes	No	DK
Does the community trust the mines?	27%	73%	-
Do some mines have better environment performance than others?	44%	12 %	44%
Do some mines contribute more to the community than others?	64%	5%	31%
Are some mines more responsive than others	44%	36%	20%
Are some mines more trustworthy than others?	23%	19%	58%

N=28

Finally, participants were asked generally what were the main issues facing Muswellbrook. The top issue identified was dealing with the impacts of mining (7 responses) followed by: unemployment (6), a bypass for the town (4) and achieving long term sustainability of the community (4).

THE WORKSHOP

The workshop was conducted in Muswellbrook on 24th August, 2004 over a half day, using a locally based independent consultant. The primary aim of the workshop was to promote dialogue amongst multiple stakeholders and explore the scope for achieving a consensus on: (a) the key issues that warranted attention by the local mines, including Drayton; and (b) how progress in dealing with these issues could be measured. It was also envisaged that the workshop would provide participants with an opportunity to communicate their views directly to Drayton management representatives.

Invitations to attend were issued to 19 people, most of whom had previously participated in the stakeholder interviews. Fifteen people attended on the day, representing a good range of groups.** In addition, personnel from Drayton and Mt Arthur mine were present as observers, along with three researchers from the CSRM.

Prior to the workshop, participants were provided with a short briefing paper which outlined the objectives of the exercise and summarised the findings from the stakeholder interviews. Participants were told that information from the workshop would contribute to a broader review that Drayton was conducting of its management of community issues (the Anglo American SEAT process) as well as to the CSRM's research project.

On the day, workshop participants were formed into two groups and each group was asked to consider three broad questions:

1. What has Drayton mine and the coal industry done well?
2. What have the mines not done so well and how could this situation be improved?
3. How could these improvements be measured?

The first session focused on the economic impacts of mining, the second on the management of 'near neighbour' issues and the third on the management of broader environmental and social impacts. At the end of each session, a member of each group presented to the workshop as a whole on the issues that had been identified by their group. Industry and CSRM representatives left the room while the smaller groups met, but returned to hear the feedback to the larger group.

In the final session the facilitator invited participants to raise any other issues they considered warranted attention. The workshop concluded with the SHEC manager for Drayton thanking attendees for their contribution and reiterating that Drayton would provide a follow-up response to specific issues that had been raised in the course of the workshop.

The collective responses of the workshop to the three overarching questions are summarised below. As was the case with the individual stakeholder interviews, most participants (apart from the 'near neighbours') focused on the performance of the local industry as a whole, rather than Drayton in particular.

** An important sector not represented at the workshop was local youth. It had originally been intended to invite some students from the local high school, but there proved to be a number of administrative obstacles to doing this.

What have Drayton and the other mines done well?

- Provided economic benefits and employment for the community
- Contributed to infrastructure development
- Provided cash and in-kind support to a range of community activities and groups
- Improved their environmental monitoring systems
- Contributed to heightened community awareness of OH&S and environment issues

What have the mines not done so well?

- The industry has not provided adequate employment and training opportunities for youth and Indigenous people.
- The industry should support local businesses more – the global purchasing policies of some companies are having a negative impact.
- The industry as a whole needs to be more responsive to ‘near neighbour’ impacts.
- 12 hour shifts & continuous rosters have impacted negatively on families and communities.
- Cumulative environmental impacts are an important issue for Muswellbrook but this issue is not being addressed at present – the mines are just focusing on their own operations.
- The local mines should be more proactive in seeking out the views of the community (eg in relation to closure and post mine land use) and in communicating their future plans. Consultation strategies need to be more diversified and involve more members of the community.

How could improvements be measured?

- Undertake periodic surveys of ‘near neighbours’ to identify any issues of concern and track levels of satisfaction with how these issues are being addressed
- Report on the number of local young people being taken on each year by the industry
- Require companies to report publicly on how much money they are spending with local businesses
- Monitor and report on the number of employees working 12 hour shifts
- Survey the wider community about their views towards and acceptance of mining
- Develop methods for measuring the cumulative impact of the mining industry on Muswellbrook

Few new issues were raised at the workshop, but the exercise added value in other ways. First, it gave Drayton a clearer picture of the matters that were of *most* concern to external stakeholders. Second, the workshop groups generated a number of practical suggestions about how progress in dealing with these issues could be assessed. Third, the workshop helped to highlight what people did – and did not – know about the current environmental and social

management practices of Drayton and other mines in the area. This will be valuable for devising more effective and appropriate communication strategies.

Perhaps most importantly, the workshop gave participants the opportunity to voice their concerns to other members of the community and industry representatives. This was particularly valued by the ‘near neighbours’ in attendance, some of whom had felt frustrated by what they perceived to be a lack of progress in addressing their particular issues (eg. property damage due to blasting, dust in water tanks). Drayton, for its part was seen to be listening and to ‘cop it on the chin’, which in turn should help to build trust with this section of the community – provided, of course, that there is appropriate follow-up on the issues that were raised.

CONCLUDING OBSERVATIONS

SUMMARY OF KEY THEMES

The stakeholder interviews and workshops, while covering a broad range of issues, can be distilled into a small number of key themes. While some of these themes are primarily relevant to the Muswellbrook situation, others are likely to have more general applicability to the Australian mining industry.

First, it is clear that most people in the community accept that the mining industry is a key driver of the local economy and that the fortunes of Muswellbrook are, to a considerable extent, tied to the future of the industry. In this respect, the community does not need to be ‘sold’ on the overall value of coal mining. Rather, their concerns relate more to how the benefits and opportunities generated by the industry are being distributed: for example, the perceived decline in support for local businesses, employment of non-locals, the lack of opportunities for young people and Indigenous people, and so on. There is also concern about whether, and how, the economic benefits that mining has brought can be sustained over the longer term, once the coal begins to run out.

Second, the environmental impacts of mining – both on ‘near neighbours’ and the wider area – are an important issue for the Muswellbrook community. ‘Near neighbours’ have a range of specific issues that demand attention, although not all of these will be amenable to resolution. The community more generally has concerns about dust, noise, visual impacts, water quality and the loss of farming land to mining. Most of these concerns relate not to the impact of any one operation, but to the overall – or ‘cumulative’ – impact that mining is having on the area. As the local mining industry recognizes, unless the industry is seen to be taking appropriate action to manage and mitigate these impacts, it will be increasingly difficult to obtain regulatory approval for further expansion of mining activity in the region.

Third, it is apparent that in Muswellbrook, as elsewhere, trust – or, rather, the lack of it – remains an issue for the industry. While most stakeholders acknowledged that the environmental and social performance of the local mining industry had generally improved in recent years, this was often attributed to stricter regulatory controls rather than to the industry’s own efforts. There is still a strong perception in some sections of the community that, if the mines could get away with doing less in the environmental and social area, they would. Part of the problem here is that the community does not appear to be well informed about the range of voluntary initiatives that Drayton and other mines have already taken to

improve their performance in these areas (for example, by operating below the exceedances which they are allowed under their licences). A more targeted approach to presenting this information to community opinion leaders (e.g. by holding periodic briefing sessions) might help to correct some of these misperceptions. However, more is required than just improving the one-way flow of information. The key to building and maintaining trust over the longer terms lies in being open and honest with the community, engaging in *active dialogue* with stakeholders about issues of concern, and, most importantly, responding to these concerns and following through with action. The process initiated by Drayton is an important step down this path.

A final observation is that some stakeholders were prone to over-state the extent to which the mining industry and its practices had been the cause of social and environmental changes in the Muswellbrook area. For example, criticisms of the industry's water management practices tended to overlook the fact that the long term decline in water quality in the Hunter River is due largely to land degradation and agricultural practices over many decades. Likewise, the closure of shops in Muswellbrook's main street – which some attribute to the increased traffic generated by the mines – is more likely due to the opening of a new shopping centre with undercover parking (something which has occurred in many Australian towns). On a broader level, the growing social division between high and low income earners is a feature of Australian society generally, not just of mining communities (although the high wages paid in the industry is undoubtedly a contributing factor at the local level). From the industry's perspective, it is frustrating to be held responsible for outcomes which, to a considerable extent, are beyond its sphere of control. However, it is still important to engage with the community around these issues; otherwise, the view that 'mining is to blame' risks becoming self-perpetuating.

NEXT STEPS

Drayton has already responded directly to workshop participants about a number of specific matters raised at the workshop. The next step, which has already commenced, will be for Drayton management, with input from the CSR, to formalise an impact monitoring and management strategy for the site. This strategy will: identify the community issues and impacts of most relevance to the site (having regard to the issues raised in the interviews and workshop); detail a process for monitoring and reporting on progress in dealing with these impacts; and identify actions that can be taken at site level that will address concerns raised by stakeholders and contribute to positive outcomes for the community. Particular aspects that are likely to be focused on include:

- processes for engaging with 'near neighbours' and for monitoring and reporting on performance in this area
- recruitment and training opportunities, particularly for young people and the local Indigenous community
- local purchasing practices
- procedures for allocating donations and in-kind support for community groups
- on-going community engagement and communication processes.

The strategy will also identify issues that need to be addressed collectively by mines in the Muswellbrook area (such as through the Muswellbrook mine managers' forum) rather than just by Drayton acting individually.

The other main output from the project will be a report by the CSRSM that documents what was learned from the case study and describe the process that was followed to enable it to be adapted for use by other operations. A sourcebook of potential community impact measures will also be prepared. The report and sourcebook should be completed by the end of the year and will then be disseminated to industry personnel and other interested parties

CONCLUSION

Increasingly, mine sites are being required to take account of the impact of their activities on surrounding communities and to implement strategies to mitigate negative impacts and promote positive outcomes. In developing these strategies, sites need to actively engage with their communities, in order to ensure that monitoring and management activities are focused on issues of concern to local stakeholders. Involving the community also gives legitimacy to the process by communicating to people that their views matter. The engagement process described here – especially the multi-stakeholder workshop – has been valuable to Drayton at a number of levels. The next challenge is to ensure that there is appropriate follow-up on the issues raised by the community. Drayton is committed to providing this follow-up and to maintaining an on-going dialogue with its key stakeholders.

ACKNOWLEDGEMENT

We are grateful to Jenny Moffatt for her assistance in preparing this paper and her contribution to the project generally.

REFERENCES

Department of Urban Affairs and Planning 1997, *Upper Hunter Cumulative Impact Study and Action Strategy*, New South Wales Government.

Hunter Valley Research Foundation 2003, *Newcastle and the Upper Hunter Region 2002-2003*.

ICMM 2003, ICMMM SD Framework. Available from: http://www.icmm.com/html/icmm_principles.php [Accessed 16/9/03].

World Coal Institute 2001, *Sustainable Entrepreneurship: The way forward for the coal industry*. Report prepared for the United Nations Environment Programme, p.46.

Table A1: Positive aspects of mining, by sector

<i>Aspect</i>	<i>Near neighbour (n=5)</i>	<i>Local government Representative (n=1)</i>	<i>Regulators (n=1)</i>	<i>Town businesses (n=6)</i>	<i>Other land users (n=5)</i>	<i>Indigenous (n=2)</i>	<i>MineWatch (n=1)</i>	<i>Education, health & welfare (n=5)</i>
Long term economic benefits for community	✓	✓	✓	✓	✓	✓		✓
Increased employment opportunities and local skill base	✓	✓	✓	✓	✓	✓		✓
Community support, eg sponsorships, infrastructure	✓	✓	✓	✓	✓			✓

Table A2: Negative aspects of mining, by sector

<i>Aspects</i>	<i>Near neighbours</i> (n=5)	<i>Local government representative</i> (n=1)	<i>Regulators</i> (n=1)	<i>Town businesses</i> (n=6)	<i>Other landusers</i> (n=5)	<i>Indigenous</i> (n=2)	<i>Mine Watch</i> (n=1)	<i>Education, health & welfare</i> (n=5)
Environment amenity: dust, noise, damage, water, traffic	✓	✓	✓	✓	✓	✓	✓	✓
Social divide (income differential b/n mining & non mining families)	✓	✓		✓	✓	✓	✓	✓
Employment (skill shortages; lack of opportunities for youth, Indigenous people, locals)	✓			✓	✓	✓	✓	✓
Lack of post mining planning			✓		✓	✓	✓	✓
Loss of arable land, both currently and post mining				✓	✓	✓	✓	✓
Industry only does what regulations require, or less	✓			✓		✓	✓	
Lack of trust of mining companies by community members	✓				✓		✓	✓
12 hr shifts and continuous rosters bad for families and community involvement				✓			✓	
Local economy becoming too dependent on mining				✓				✓