Centre for Social Responsibility in Mining

A Sourcebook of Community Impact Monitoring Measures for the Australian Coal Mining Industry

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PART 1: INTRODUCTION

Purpose of the Sourcebook

This sourcebook has been prepared to assist mining operations in monitoring and reporting on significant community impacts and issues of concern. It provides guidance on how particular impacts can be measured, indicates what information is required to construct these measures, and advises on their use and interpretation. The sourcebook should be used in conjunction with the accompanying Guidance Document on developing a 'Community Impact Monitoring and Management Stategy', which advises sites on how to select measures that are appropriate to their particular situations.

Why monitor community impacts?

There are three main reasons why mining operations should be monitoring their impact on local communities:

1. Good monitoring processes can act as an 'early warning' system and provide sites with feedback on the progress they are making in addressing issues of concern to local stakeholders.
2. Mining operations are coming under increasing pressure to report both internally and publicly on their social, as well as economic and environmental performance. Current reporting frameworks are widely acknowledged to be inadequate, because they focus on 'measuring what is easy', rather than 'measuring what matters'.
3. At a more general level, improving the quality and quantity of information available about the impacts (positive as well as negative) of mining on local communities will assist the industry in contributing to public discussions about the value of mining, and help inform the shaping of regulatory policy.

Scope

The sourcebook includes measures that are currently being used in the Australian mining industry, along with other measures that could potentially be applied. Potential measures have been identified from sources such as the Global Reporting Initiative (GRI) minerals industry supplement, and reports from companies operating in other mining sectors and in related industries such as the oil and gas sector.

The sourcebook has been prepared primarily for use by the Australian coal mining industry. This means that some impact measures that are more relevant to less-developed regions and other sectors of the industry have not been included. For example, while the issue of AIDS in the workforce and surrounding community is of critical importance to many African mining operations, it is not a significant issue for the Australian industry.

Structure of the Sourcebook

Measures are grouped according to whether they relate to:

- the economic impact of a mining operation
- employment-related impacts
- community support and engagement processes
- environmental impacts
- demographic impacts

Each of these categories is, in turn, sub-divided into sections dealing with specific aspects of that impact, as shown below.

For each impact sub-category the sourcebook provides information about:

Suggested Metrics - possible measures that could be used to monitor this impact

Information and support requirements – advice on how to construct these measures, data requirements and possible costs

Applicability – advice on when this impact is most likely to be relevant

Advice on use - factors that should be considered when using and interpreting measures of this impact

GRI link - whether there are broadly corresponding measures in the Global Reporting Initiative (GRI) framework for the minerals sector (see below)

Industry Examples – where available, a link to a company or site report that uses one or more of the suggested measures; examples are drawn from both the coal and non-coal sectors.

The GRI

The GRI is a major multi-stakeholder initiative aimed at developing a generic set of sustainability indicators for organisations to report against. The GRI has also worked with different groups to customise this set to suit specific industry sectors. Recently, it released a Mining and Metals Sector Supplement, developed in conjunction with the International Council on Mining and Metals (ICMM). Amongst other things, the GRI requires signatories to provide a:

> *description of policies to manage impacts on communities in areas affected by activities, as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring [and to] include explanation of procedures for identifying and engaging in dialogue with community stakeholders (Guideline SO1).*

Early in 2005, the member companies of the ICMM announced that they had agreed to report on their sustainable development performance using the GRI Framework and the Mining and Metals Sector Supplement. The target date for achieving this is within two reporting cycles. Most of the larger companies with coal mining operations in Australia (e.g. BHP Billiton, Rio Tinto, Anglo American) are members of the ICMM.

The GRI reporting framework is aimed primarily at the corporate level, rather than at specific operations and their associated communities. However, the information required to support these measures often needs to be collected from each site and then aggregated into a company-wide indicator. More information about the GRI can be found at www.globalreporting.org.

Advice on selecting and using measures

1. Operations should concentrate on monitoring and measuring their impacts in key areas, rather than attempting to track everything. In determining what impacts to focus on, sites need to take account of what their external stakeholders regard as important, rather than unilaterally imposing their own measures.
2. Where practical, operations should endeavour to use multiple measures, rather than a single metric. This will provide a more complete picture and enable patterns and trends to be cross-checked.
3. Although the bulk of the measures presented in the sourcebook are quantitative, qualitative measures will sometimes be more appropriate. For example, where community issues are concerned, well-constructed qualitative measures (e.g. a summary of feedback from key external stakeholders) will often be of more value to organisations than simple, and possibly misleading, numerical indicators.
4. Wherever possible, quantitative measures should be indexed, as well as expressed in absolute terms. For example, operations will communicate much more about their social performance if they report the proportion of their workforce who are Indigenous, as well as the total number of Indigenous people employed. Indexing facilitates comparisons across sites (provided that the same underlying measures and definitions have been employed) and also enables performance to be tracked over time.
5. In interpreting trends, it is important always to check that the variation is 'real' rather than a consequence of changes in how data have been collected and/or categorised. An abrupt change in a measure will quite often be due to such extraneous factors.

A final, very important, point is that developing an impact monitoring framework should be part of a broader engagement strategy, rather than just an end in itself. The sites that are most attuned to the effects of their activities on local communities do not rely only on formal measures, but also make extensive use of informal feedback from community members and 'local intelligence'. The best way of obtaining this information is to engage in a variety of forums with different sections of the local community. Measurement without engagement exposes sites to the risk that they will overlook or misinterpret

significant local developments and issues.

Multi-site Impacts

The focus of the sourcebook is on measures that can be used by individual sites. However where multiple operations impact on the same community, sites should consider cooperating on the development and application of aggregate impact measures. This is a focus of a current ACARP funded study, being conducted by the Centre for Social Responsibility in Mining and the Centre for Water in the Minerals Industry at the University of Queensland.

Defining the 'local community'

For many of the measures discussed here, a threshold question which will have to be addressed is: what constitutes the 'local community'? In some instances, it will also be necessary to determine the region in which the mine is located.

In the case of a sparsely populated area, where there is a single town associated with a mine, the issue of what is 'the community' can be resolved fairly easily. However, matters can become more complicated where a mine is in a settled area and there are multiple settlements relatively close by. In these circumstances, input should be sought from external stakeholders as to what they consider to be the 'local community' of the mine. Where practical, the boundaries of this community should then be defined to align with officially recognised categories such as a local government area, or a census collection district.

The definition of 'region' that is used should generally align with some accepted categorisation used by Government (for example, 'the Upper Hunter', 'Central Highlands' or 'Mackay and Whitsundays').

Regardless of what definitions of 'local' and 'regional' are employed, they need to be made explicit and applied consistently.

SECTION 2: POTENTIAL MEASURES

Economic impacts

Impact dimension	Contribution to local businesses
Suggested Metrics	1. *$ value of goods and services purchased from local businesses* 2. *% of site's supply budget spent locally and regionally*
Information and support requirements	Many mines now have financial management systems that capture information about suppliers' location details. In such cases, it should be a relatively straightforward process to retrieve this information. However, complications can arise when local franchises use national billing systems, as this may understate the extent of the local spend. An additional data field may be needed to record the address from which the goods were actually obtained, as distinct from the billing address. Where this information is not routinely recorded, it will be necessary to collect it manually from invoices etc, which may be a time consuming exercise. An acceptable 'interim' strategy is to take a random sample of payments and/or time periods and extrapolate.
Applicability	This information will be of broad interest, although the size and nature of the local economy will have a significant impact on the scale of opportunities for local spending
Advice on use	Sites will often want to monitor and report on their regional, as well as local, spend, especially where the immediate community is very small and unable to provide many of the services required. Where a mining contractor is used, expenditure data from the contractor should be included if available.
GRI References	Mining Supplement MM1 (Partial) – "Percentage distribution of all goods, materials and services purchased locally"
Example of use	Bendigo Mining – *Community and Environment Report 2004* http://www.bmnl.com.au/

Impact dimension	Value of wages and salaries paid locally
Suggested Metrics	*1. $ value of wages and salaries paid to employees and full-time contractors residing in the local area* *2. Value of wages and salaries paid locally as a percentage of total wage and salary payments for the site*
Information and support requirements	Payroll systems usually record where employees live. However, there may be some difficulties in integrating contractor and company data, as contractors often maintain separate systems. It is important that address details are kept up to date, to enable the system to distinguish between a person's address at the time they were employed and their current address.
Applicability	Communities may be more interested in receiving data about the number of local jobs generated than their economic value.
Advice on use	These measures will generally overstate the direct $ value of the contribution of a mine to the local community, as only a proportion of wages and salaries paid to people living locally will actually be spent locally. (For example, in Central Queensland, there is a considerable outflow of income to buy real estate in coastal areas and larger consumer items, such as cars and white goods, are often purchased in regional centres such as Mackay.) Information about how much employees actually spend locally can be obtained via a survey, repeated at regular intervals.
GRI References	EC5 – "Total payroll and benefits …. Broken down by country or region"
Example of use	Placer Granny Smith – Sustainability Report 03 Total wages for employees and contractors paid in the NE Goldfields, WA and Nationally *http://www.placerdome.com/sustainability/reports/sites.htm*

Impact dimension	Contribution to local infrastructure
Suggested Metrics	1. *$ value of local authority payments (rates, infrastructure maintenance etc)* 2. *$ value of contributions to local public infrastructure*
Information and support requirements	Details of annual payments to council and other local authorities (eg. water authorities) should be readily available from site accounts. Sites will generally keep records of public infrastructure contributions, although historical records may be difficult to access for long established operations.
Applicability	Major contributions to public infrastructure tend to be made at the outset of projects, rather than on an ongoing basis. Documenting these payments as a 'one-off' exercise may be a useful exercise, but there is likely to be only limited value in monitoring year-to-year trends. On the other hand, local authority payments are made annually and can be reported on that basis.
Advice on use	Information about the $ value of local authority payments is difficult to interpret unless this can be compared to the demands that the operation places on local infrastructure. If this indicator is used, there will need to be some discussion of this issue.
GRI References	GRI EC12 – "Total spent on non-core business infrastructure development", examples quoted include hospitals or schools GRI Mining Supplement MM1 (Partial) – "Investment in public infrastructure and its maintenance"
Example of use	None identified

Impact dimension	Overall economic contribution to the local area
Suggested Metrics	*1. $ value of the site's direct economic contribution to the local community* *2. Direct local expenditure as a percentage of the site's total expenditure* *3. $ value of the site's direct and indirect economic contribution to the local community*
Information and support requirements	These measures require comprehensive data on the value of wages and salaries paid and all non-salary expenditure (contractor payments, purchases from businesses, payments to local authorities), broken down by locality. Indirect economic impacts are usually estimated by applying standard multipliers, rather than by direct measurement. However, multiplier effects are not constant across sites, raising issues about the validity of estimates. A preferred approach is to develop locality-specific multipliers, but this can be a substantial exercise.
Applicability	The high level nature of these measures means that they are unlikely to pick up year-to- year changes in site-level economic impacts, unless there are major changes. Consequently, these measures are likely to be more useful for occasional, more detailed, impact studies than for year-to-year monitoring and reporting.
Advice on use	Community stakeholders may find measures that include indirect economic impacts difficult to interpret and may be sceptical of the numbers that are generated. Careful explanation of the data and the underpinning assumptions will be required.
GRI References	Mining Supplement MM1 – "Local economic contribution and development impact"
Examples	Coal and Allied – Social and Environmental Report 2003 "Contributions to the economy", broken down into supplier payments, wages and benefits, and taxes and royalties. Figures then sub-divided into Hunter Valley, rest of NSW, National and International. Economic and Social Impacts of the Coppabella Mine on the Nebo Shire and the Mackay Region Rolfe et al (2003) http://www.bowenbasin.cqu.edu.au/pdfs/part1Aexecsummaries.pdf

Employment-related Impacts

Impact dimension	Employment of locals
Suggested Metrics	*1. Number and per cent of employees in workforce recruited from the local area (including employees of contractors)* *2. Number and per cent of employees residing locally* *3. Number of employees recruited from the local area during the reporting period*
Information and support requirements	Details of employees' addresses, including postcodes, will normally be recorded in site HR systems. Contractor information could be harder to obtain as it is often recorded in separate systems. Some HR systems may only record details of current addresses, as distinct from a person's address at the time they were recruited. Where this is the case, a separate field will need to be created to indicate whether the employee was 'locally sourced'. Alternatively, this information can be collected manually by reviewing annual recruitment records. The definition of a 'local' person may sometimes be an issue. (For example, should a person who has moved away, but then comes back when a job becomes available, be regarded as a 'local'?) Wherever practical, the definition that is adopted should have been discussed and agreed with relevant local stakeholders.
Applicability	Local employment will be of interest to most communties.
Advice on use	The number of employees living locally does not, of itself, give an accurate picture of a site's commitment to local employment as these employees may have been imported, rather than recruited locally. Hence, it is important to distinguish the number of employees currently living locally from the number recruited locally. Local employment data is best presented in terms both of 'stock' (the total number of local employees in the workforce) and 'flow' (the number of locals recruited and separated in the reporting period). Flow data gives a more accurate representation than stock data of a site's current level of commitment to local employment.
GRI References	LA1 (Partial) – "Breakdown of workforce by region/country" Mining Supplement MM1 (Partial) – "Percentage of workforce from local communities"
Example of use	Comalco Bell Bay – Sustainable Development Report 2004 'Where Our People Live' – lists % of workforce living in Launceston, three other nearby communities and 'Other' *http://www.comalco.com/document_get.aspx?id=520*

Impact dimension	Overall contribution to local employment
Suggested Metrics	*1. Total number of jobs generated in the local community by the mine (direct, indirect and induced)* *2. Per cent of the local workforce directly and indirectly employed by the mine*
Information and support requirements	Data on the number of people directly employed by the operation – either as company employees or permanent contractors - should be relatively easy to obtain (see above). Indirect employment will need to be calculated by requesting non-site based contractors and suppliers to estimate the proportion of their workforce employed on mine-related work. Induced employment refers to the number of people in the local economy (e.g. in the retail sector) who are employed due to the spending of direct and indirect employees. Measuring this impact directly is difficult and time consuming, so an estimation technique is normally used. Anglo American has advised its sites that induced employment should be assumed to be 10 to 20 per cent of the sum of direct and indirect unemployment. Estimates of the size of the local workforce can be obtained from the five yearly census conducted by the ABS; for intervening years, an extrapolation will be required.
Applicability	The high level nature of these measures makes them more useful for occasional, more detailed, impact studies than for year-to-year monitoring and reporting. The proportion of a local workforce directly or indirectly employed by a mine is a useful indicator of the economic diversity of the community and therefore of its capacity to survive beyond mining.
Advice on use	Community stakeholders may find measures that include indirect and induced employment difficult to interpret and may be sceptical of the numbers that are generated. Careful explanation of the data and the underpinning assumptions will be required.
GRI References	None
Example of use	None identified

Impact dimension	Changes in job availability
Suggested Metrics	1. *Total number of jobs added or lost in reporting period* 2. *Total number of employees residing locally who have lost jobs as a result of re-structuring etc.*
Information and support requirements	This information will be readily available from HR systems.
Applicability	Local communities will generally be very concerned about job losses because of the flow-on economic and social impacts. Job reductions are not currently an issue for most operations – other than those moving towards closure - as the industry is in a growth phase. However, given the cyclical nature of the sector the issue is likely to re-emerge at some stage in the future. To maintain their credibility, sites should be equally willing to report negative and positive trends in employment.
Advice on use	None – measures are straightforward to apply and interpret.
GRI References	None
Example of use	None identified

Impact dimension	Employment and training of young people
Suggested Metrics	1. *Number of apprentices and trainees involved in schemes run or sponsored by the mine (numbers starting, continuing and graduating within the reporting period).* 2. *Number of graduating apprentices and trainees finding continuing employment within 12 months (either at the mine or elsewhere).*
Information and support requirements	Data on the number of apprentices and trainees employed on site should be readily accessible. In some cases, sites may sponsor traineeships and apprenticeships in other companies and industries. These should also be included in any count. Where apprentices and trainees leave a site upon, or prior to, graduation, an exit interview should be conducted to ascertain their employment plans. For all 'departing' apprentices and trainees there should be follow-up contact after 12 months, if possible, to ascertain their employment status.
Applicability	Providing employment opportunities for young people is an area of concern and interest for many communities, so this impact dimension is likely to be of relevance to most, if not all, sites.
Advice on use	Where possible, sites should endeavour to monitor the effectiveness of training schemes (measured by employment outcomes) as well as the number of individuals who participate in such schemes.
GRI References	LA16 (Partial) – "Programmes to support the continued employability of employees…."
Example of use	Anglo Coal Australia - 2004 Sustainability Report Lists program numbers and scholarship value. *http://www2.recruitmanager.net/anglocal/publicjobs/index.cfm?cid=25*

Impact dimension	Employment and training of Aboriginal people
Suggested Metrics	1. *Total number of self-identified Aboriginal people employed at the mine (including by contractors)* 2. *Number of Aboriginal people employed in reporting period* 3. *Per cent of the mine workforce who identify as Aboriginal, relative to the percentage of Aboriginal people in the local population* 4. *Number of Aboriginal people receiving training support from the mine in the reporting period (broken down by type of training)* 5. *Number and per cent of Aboriginal people who complete training programs and who find employment within 12 months*
Information and support requirements	The standard means of determining Aboriginality is by self-identification. This information is best collected at the time a person is first employed. In the case of established operations which have not collected this information in the past, a possible strategy would be to send a circular to all employees asking them to indicate if they define themselves as Aboriginal, and stating why this information needs to be collected. Information on the proportion of the local population who are Aboriginal is available from ABS Census data. Training data will normally be retained by HR sections. Follow-up on outcomes of training programs will require a process similar to that proposed for young people (see above).
Applicability	These measures will be particularly relevant to those operations which have significant Aboriginal populations in nearby communities and/or which are covered by Native Title Agreements. However, even where there are few local Aboriginal people it may be necessary for sites to capture these data to meet corporate reporting requirements.

Impact dimension	Employment and training of Aboriginal people cont'd
Advice on use	Low rates of Aboriginal employment in the coal mining sector make it impractical at this stage to utilise more finely grained measures, such as the number and proportion of Aboriginal employees in supervisory positions. When and if employment increases, further measures should be added. Given that mine workforces may have low turnover, reporting 'flow' data (i.e. the proportion of new recruits who are Aboriginal) in addition to 'stock' data, will give a more accurate representation of a site's current level of commitment to employing and training Aboriginal people.
GRI References	SO1 (Partial) – "Programs for training workforce drawn from local communities" HR12 (Partial) – "Policies, Guidelines and procedures to address the needs of indigenous people"
Examples of use	Argyle Diamonds Sustainability Report 2004 Number of Indigenous employees, reported in number and percentage terms with target and time series http://www.argylediamonds.com.au/publications/sustainability_report_2004.html Comalco Weipa – Sustainable Development Report 04 Number of new Indigenous trainees and apprentices *http://www.comalco.com/document_get.aspx?id=493*

Impact dimension	Employment of women
Suggested Metrics	1. *Total number and proportion of mine workforce who are female, broken down by area of employment* 2. *Number of females recruited in reporting period* 3. *Number of females receiving training support from the mine in the reporting period (broken down by type of training)*
Information and support requirements	Information on the gender and occupation of employees and trainees should be readily available from HR systems.
Applicability	This issue will be relevant to all sites. Gender data generally have to be collected to meet internal and external reporting requirements.
Advice on use	It is important to track not only the total number of women employed, but also where that employment is concentrated. This will enable sites to track whether progress is being made in breaking down traditionally male bastions of employment, and whether women are obtaining access to better paid and higher status jobs on site. Given that mine workforces are often very stable, reporting 'flow' data (i.e. the proportion of new recruits who are women) in addition to 'stock' data, will give a more accurate representation of a site's current level of commitment to employing women.
GRI References	GRI LA11 (Partial) – "Composition of senior management … including female/male ratio"
Example of use	Thiess Sustainable Development Report 2003/4 Provides data on the proportion of women in various functional areas. *http://www.thiess.com.au/?a=3187*

Impact dimension	Hours of work
Suggested metrics	1. *% of employees working 12 hour shifts and/or regularly working weekends* 2. *Average hours of work*
Information and support requirements	This information should be readily accessible via HR systems.
Applicability	Communities and employees are likely to be interested in this aspect.
Advice on use	If these data are to be presented in a public report, it is important that there be some interpretation of the data.
GRI References	None
Example of use	None identified

Community support

Impact dimension	Level and type of support provided to local communities
Suggested Metrics	1. *$ value of cash and in-kind contributions made to local organisations and individuals in the reporting period, broken down by type of activities supported (e.g. education, welfare, cultural, community development, sporting)* 2. *Number and percentage of employees reporting regular involvement in local voluntary organisations* 3. *Description of major community programs and activities that are supported by the site/company* 4. *Number of people participating in/ benefiting from these programs and activities and demographic group of recipients (e.g. gender, age, Aboriginality)*
Information and support requirements	1. Sites generally keep good records of financial donations, but records of in-kind commitments (employee time, equipment use etc.) may not be as accurate. A separate register may have to be set up and maintained to capture this information. 2. Information about employee involvement in voluntary organisations is unlikely to be routinely recorded and therefore will probably need to be collected via a workforce survey (possibly conducted every two years). 3. Some recipient organisations will routinely record information about the number of program participants, but others may not. To overcome this, sites should consider requiring recipient organisations to report back annually on how the support was utilised and who benefited from it.
Applicability	Sites have an interest in ensuring that their local community is properly informed about how the site is contributing to that community. Parent companies also have a strong interest in collecting and reporting this information.
Advice on use	Rather than just tracking and reporting on the $ value of donations, companies and sites should also be taking an interest in the outcomes of this support (who benefits and how). However, it may not be practical to measure this on an annual basis. Some mining companies (e.g. BMA and Rio Tinto) run community programs on a regional, rather than site-specific, basis. In these cases, it is not necessary to report data separately for each site.
GRI References	E10 – "Donations to community, civil society and other groups broken down in terms of cash and in-kind….."
Examples of use	Illawarra Coal Sustainability Report 03/04 - Provides a breakdown of community program funding according to target are e.g. arts culture, education, sport/recreation….. *http://www.bhpbilliton.com/bb/sustainableDevelopment/operationsHSECReports.jsp* Coal and Allied – Sustainability Report 2004 - Provides a descriptive list of volunteer activities, although no data on numbers or extent of involvement. *http://www.riotinto.com/library/reports/PDFs/2004_Ca_Australia.pdf*

Impact dimension	Support for local education
Suggested Metrics	1. *$ value of cash and in-kind contributions to local schools and other education and training bodies, made in reporting period, broken down by recipient organisation (e.g. primary schools, secondary schools, TAFE, adult education)* 2. *Number of students from local schools receiving scholarships/financial support from the mine for school or University; shown separately for children of employees and non-employees* 3. *Number of local school students/TAFE students provided with work experience opportunities*
Information and support requirements	Information on scholarship recipients and number of work experience students should be relatively easy to retrieve from corporate records. Sites generally keep good records of financial donations, but a separate register may be required to record in-kind contributions.
Applicability	Supporting local education is a well recognised way in which mining operations can contribute to the development of human capital in a community. It will generally be in the interest of sites and companies to capture this information.
Advice on use	In some cases, sites provide scholarships and work experience opportunities only to the children of employees. In the interests of transparency, sites should be open about which groups in the community are receiving support.
GRI References	SO1 Mining Supplement commentary (partial) – "Community … access to further education and skills training"
Example of use	Newcrest Cadia Provides descriptive and quantitative account of local University scholarship program at Cadia. *http://www.newcrest.com/upload/pdfs/scholarships.pdf*

Impact dimension	Support for community health services and programs
Possible measures	1. *$ value of cash and in-kind contributions made in the reporting period to community health services and programs* 2. *Description of the services and programs that are supported by the site/company* 3. *Number of people accessing these services and programs*
Information and support requirements	See previous comments about the need for sites to set up processes to ensure that in-kind contributions are accurately recorded. Data on the number of people who access services and programs will generally need to be obtained from the provider organisations. Consideration should be given to requiring organisations to provide this information as a condition of funding.
Applicability	The issue of support for community health initiatives is most likely to arise in relatively isolated communities where the mine is a major employer.
Advice on use	Collecting information about the number of people who access services and programs, as well as the $ value of contributions, will give a more complete picture of the impact that a mine is having in this sphere.
GRI References	None specific to this aspect
Example of use	None identified

Community Engagement

Impact dimension	Community engagement processes
Suggested metrics	*1. Number and type of community contacts in reporting period involving site personnel* *2. Number of community stakeholder representatives involved in site-initiated meetings and presentations* *3. Perceived responsiveness and trustworthiness of site management* *4. Qualitative feedback from stakeholder groups*
Information and support requirements	1 & 2 Require a register for recording meetings attended and other contacts, plus details of external stakeholders involved. 3. This measure requires a regular survey designed and carried out by an independent organisation, perhaps at 2-3 yearly intervals. Various standard survey items have been developed to measure and track site performance in this sphere. 4. Qualitative data on stakeholder perceptions are best collected through one-on-one or group interviews, preferably undertaken by an independent person.
Applicability	All sites have, or should have, an interest in monitoring the extent and effectiveness of their community engagement strategies.
Advice on application	Measures of the number of contacts, by themselves, do not provide any indication as to the quality of those contacts. Data on the quality of engagement can only be obtained by undertaking stakeholder interviews and/or community surveys. Where there are multiple mines in an area, consideration could be given to pooling resources with other operations and conducting a community survey for the local industry as a whole.
GRI References	None specific to this aspect
Examples of use	Anglo Coal Drayton – Mine Report 2004 Descriptive account of the number and type of meetings involving local communities attended, plus interactions with local education programmes. *http://www2.recruitmanager.net/anglocal/publicjobs/index.cfm?cid+31#* Placer Granny Smith – Sustainability Report 2003 Results of standard Placer community survey instrument showing range of responses for seven questions on attitude and relationship. *http://www.placerdome.com/sustainabilitysites//reports.htm*

Impact dimension	Community involvement in planning for closure
Suggested metrics	1. *Qualitative description of processes for obtaining community input* 2. *Number of community members/stakeholder representatives participating in engagement processes* 3. *Stakeholder satisfaction with the process*
Information and support requirements	Requires a register for recording meetings and other contacts, plus details of who was involved from the local community. Stakeholder satisfaction with the process is best measured through one-on-one or group interviews, preferably undertaken by an independent researcher.
Applicability	These measures will be most relevant when mines are moving towards closure, although early engagement on closure planning is increasingly recognised as important.
Advice on application	Including a stakeholder perspective is important to measuring the quality of the process.
GRI References	Mining Supplement MM10 – "Number and % of operations with closure plans, covering social….."
Example of use	BMA Gregory-Crinum 2004 HSEC Report Description of "Life of Mine Planning" process involving local community *http://www.bhpbilliton.com/bbContentRepository/Reports/GregoryCrinumReport2004.pdf*

Environment-related Impacts

Impact dimension	Amenity of 'near neighbours'
Suggested Metrics	1. *Total number and type of complaints and inquiries received in the reporting period* 2. *Number of properties from which complaints and inquiries were received in the reporting period* 3. *Number of near neighbours contacted by the site within the reporting period* 4. *Near neighbour perceptions of impacts and of site responsiveness to their concerns* 5. *Measures of actual impacts (e.g. dust levels, traffic movements, results of noise and vibration monitoring, subsidence)*
Information and support requirements	Indicators 1 and 2 require a register to be kept of all complaints and inquiries. This is often a regulatory requirement for sites. Indicator 3 requires the site to keep a record of all proactive contacts initiated and the purpose of the contact. This information is not necessarily being captured at present. Routine advice regarding activities such as blasting should generally not be included. Information about near neighbour perceptions of the site (indicator 4) will need to be collected separately, preferably by an independent researcher. Depending on the number of persons and properties in an impact zone, the information collected will generally be qualitative, rather than quantitative, in nature. A wide range of technologies are available to measure actual impacts, such as noise, dust, etc., although the data can be difficult to interpret.
Applicability	Measurement of near neighbour impacts will be a priority where mines are located relatively closely to settled areas and towns. The nature of these impacts will vary according to the type of operation (e.g. subsidence is associated with underground operations; dust is more likely to be generated by open cut operations)

Impact dimension	Amenity of 'near neighbours' cont'd
Advice on use	Complaints, by themselves, may be a poor indicator of the impact that a mine is having on its near neighbours. A rise or fall in the number of complaints may reflect a change in the willingness of people to complain, rather than any change in underlying concerns. For this reasons, periodic feedback should be sought from all near neighbours, or a sample thereof. Measures of actual impacts are important, but sites should not rely on these alone, as perceptions are also critical in this area.
GRI References	GRI Mining Supplement MM7 – "Describe any significant incidents affecting communities during the reporting period and grievance mechanisms used to resolve the incidents and their outcomes."
Example of use	Peak Gold Mines – Sustainability Report 2003 Description of each individual issue raised and the actions undertaken by the mine as a result. *http://www.wheatonriver.com/gold_projects/peak/* Coal and Allied – Social and Environmental Report 2003 Descriptive account of "Near Neighbour communication initiative", with generally qualitative information provided. http://www.riotinto.com/library/reports/PDFs/2003_CoalAllied_report.pdf

Impact dimension	Land use
Suggested metrics	1. *Opening and closing annual balances of total land disturbed, rehabilitated and not yet rehabilitated* 2. *Area of land returned to productive use, according to type of use* 3. *Amount of land expected to be permanently taken out of productive use* 4. *Performance of buffer land under mine management*
Information and support requirements	Data on disturbed and rehabilitated land is routinely recorded by sites. A definition of 'productive use' should be agreed with relevant stakeholders and reflected in the closure plan (for example, restoration to bush land, grazing, plantations). Criteria for monitoring the performance of buffer lands should be discussed and agreed with relevant stakeholders and will need to reflect local circumstances. (Industry examples include crop yields, number of hectares rabbit-free, stocking rates.)
Applicability	Land use impacts will be of the greatest interest to local communities where mining occurs close to other relatively intensive activities e.g. dairy farming, viticulture. Use of buffer lands under the control of the operation is often of interest to local communities.
Advice on use	As indicated, these measures are very context dependent. Data will require interpretation in most cases.
GRI References	ENZ3 "Total amount of land owned, leased…."
Example of use	Northparkes Mines – Social and Environmental Report 2003 Crop yield figures for farmed buffer lands, with discussion of associated issues. *http://www.riotinto.com/library/reports/2003_socEnv_Northparkes.pdf*

Demographic impacts

Impact dimension	Population change
Suggested Metrics	1. *Total community population* 2. *Estimated change in population from previous reporting period*
Information and support requirements	The main source of information about population trends is the five yearly ABS census. State and local governments will often also use supplementary measures to monitor population trends in the intervening years.
Applicability	Measures of demographic impact are only likely to be meaningful for those communities (such as traditional mining towns), where mining is the primary source of employment for the community.
Advice on use	Where significant changes in population are identified, further investigation will generally be required to determine whether these can reasonably be attributed to changes in the level of mining activity, workforce management practices (e.g. roster changes), or some other factor.
GRI References	None
Examples of use	None Identified

Impact dimension	Housing availability
Suggested metrics	*1. Number and % of rental properties vacant during reporting period* *2. Number of families on housing waiting lists*
Information and requirements	In traditional mining towns where housing is controlled by the company, this information should be held by the housing office/town manager. In other communities, local real estate agents and public housing authorities should be able to supply this information.
Applicability	The issue of housing availability will mainly arise in small communities where the mining workforce constitutes a large part of the overall population.
Advice on use	Data will need to be interpreted to ascertain the extent to which changes can reasonably be attributed to the activities of the mining operation, as opposed, for example, to general demographic shifts (e.g. children growing older and moving to a larger population centre).
GRI References	None
Example of use	None identified

Impact dimension	School enrolments
Suggested metrics	1. *Number of pupils enrolled in local schools during reporting period* 2. *Percentage of pupils who are children of mine employees*
Information and requirements	Enrolment data will be routinely collected by local schools, but additional processes may need to be in place to capture data about parents' employers.
Applicability	This issue will mainly arise in small communities where mining families account for a substantial proportion of enrolments. Generally, communities are likely to be more concerned about declining, rather than increasing, enrolments.
Advice on use	See comment on previous indicator.
GRI References	None
Example of use	None identified