Community Risks and Opportunities: A Site Level Tool

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Working Paper

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Sustainable Minerals Institute

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1. A process for identifying community risks & opportunities

The following table outlines the process steps which might be followed to conduct a comprehensive “Community Risk and Opportunity Assessment” for an operation, and identifies what tools would assist this suggested process.

<table>
<thead>
<tr>
<th>Process step</th>
<th>Supporting tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conduct an initial scan to identify community risks and opportunities that are potentially relevant to an operation.</td>
<td>Generic community risk and opportunity identification checklists and guidelines on factors to consider in evaluating specific risks and opportunities</td>
</tr>
<tr>
<td>2. Engage with local stakeholder groups to ascertain their views on risks, opportunities and potential controls.</td>
<td>Guidelines for engaging with communities and other external stakeholders and a process for capturing this information</td>
</tr>
<tr>
<td>3. Compile and summarise information from the stakeholder engagement process and other sources (e.g. SIAs, data from planning agencies, etc) in a format that will assist decision-making by site management.</td>
<td>A pro forma for presenting operation-specific information that has been collected about possible risks and opportunities. (The pro forma would follow the format of the risk and opportunity checklists.)</td>
</tr>
<tr>
<td>4. Use workshops (or some other collective decision making process) to: (a) rank risks and identify mitigating controls for high value risks; and (b) rank opportunities and identify strategies for realising high value opportunities.</td>
<td>Probability and consequence tables for ranking risks and opportunities Guidelines for conducting workshops in which the primary focus is on opportunities rather than risks. Guidelines on selecting controls.</td>
</tr>
<tr>
<td>5. Use the outcomes of the workshop(s) to prepare an integrated risk/opportunity management strategy for the site.</td>
<td>A process for integrating the outcomes of the risk and opportunity analyses into a single strategy document A framework for characterising a site’s overall risk and opportunity profile</td>
</tr>
<tr>
<td>6. Verify outcomes of the exercise with external stakeholder groups.</td>
<td>Guidelines for engaging with communities (see step 2, above).</td>
</tr>
<tr>
<td>7. Use outcomes as a reference point for annual planning and budgeting</td>
<td>Costing and valuation guidelines</td>
</tr>
</tbody>
</table>
**Step 1 - Generic risk and opportunity checklists and proformas**

A key objective of this process is to generate a checklist of community risks and opportunities that could be used to help identify potential issues and structure information for the workshop. A total of 27 impact areas, organised in 6 themes, has been defined and populated with examples of risks and opportunities. The material has been structured in a worksheet format to present it in a more ‘user friendly’ manner.

As the worksheet is formatted at present, it may inadvertently give the impression that the Opportunities section for each impact area is only aimed at identifying controls for the risks listed in the previous section. However, this is not intended to be the case. The key focus of this pre-workshop phase should be on identifying all those actions which could potentially have a positive community impact, regardless of whether they can be linked to a specific risk: the issue of whether to prioritise opportunities that are linked to risks over ‘pure’ opportunities should not be addressed until later in the process. Future versions of the worksheet and accompanying guidelines may need to make this point more explicit. The material would also benefit from being grounded more in practical experience. To this end, space has been provided to populate the worksheet with specific examples and case studies.

**Step 2 - Guidelines for engaging with communities and other stakeholders**

The aim with this component of the project was to produce a short document that would: (a) highlight to operations the importance of consulting with communities and other external stakeholders when developing a risk and opportunity management strategy; and (b) provide practical guidance on how to encourage and manage this involvement. It is intended to briefly summarise accepted good practice in the area, with users being referred to web-based resources for more detailed guidance.

The guidelines that have been developed are attached in Appendix A. They are concerned specifically with how operations should consult with and communicate with communities when developing a risk and opportunity strategy: They do not address the broader issue of how operations should manage ongoing relations with their communities, as this was assumed to be beyond the scope of the exercise. Likewise, the guidelines focus primarily on the pre-workshop information gathering stage, rather than the post-workshop, implementation phase.

One of the matters that requires further consideration is the relationship between the risk and opportunity assessment process and the Social Impact Assessment (SIA) process. Specifically: when should a full SIA be conducted and when is it sufficient to conduct a stand-alone risk and opportunity assessment? What are the differences – and similarities – between the two processes? How frequently should stand-alone risk and opportunity assessments be conducted and updated?
## 2. Risk and Opportunity - Prompts Framework

The following pages are intended as a resource for the process of undertaking a social risk and opportunity assessment. Given the enormous range of environments and communities associated with mining operations around the world, they cannot provide a complete set of examples, but are rather designed to provoke some thought about potential positive and negative impacts in a number of key areas.

The table below provides an overall framework, grouping impact areas into six organising themes. Each sub-theme is then considered in more detail, identifying factors to be considered and providing some examples of both risks and opportunities, with case studies from operations globally.

<table>
<thead>
<tr>
<th>Community health and safety</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/regional public health issues</td>
<td>Endemic diseases, community health standards, introduction and spread of diseases, disease control and prevention</td>
</tr>
<tr>
<td>Health services and facilities</td>
<td>Health services, clinics, government support, health systems, emergency access, hospitals, specialist support and availability</td>
</tr>
<tr>
<td>Community safety &amp; environmental health</td>
<td>Traffic safety, access to lease areas, emissions and discharges, heavy metals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social change</th>
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<tbody>
<tr>
<td>Demographics</td>
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<tr>
<td>Community identity</td>
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<tr>
<td>Education and training</td>
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<tr>
<td>Local political structure</td>
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<tr>
<td>Crime and social order</td>
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<tr>
<td>Security forces</td>
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<tr>
<td>Cultural heritage</td>
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<td>Indigenous communities</td>
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<tr>
<td>Resettlement</td>
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<tr>
<td>Local/regional economy</td>
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<td>------------------------</td>
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<tr>
<td>Local economy</td>
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<tr>
<td>Management of taxes and royalties</td>
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<tr>
<td>Traditional livelihoods</td>
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<tr>
<td>Artesanal mining</td>
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<td>Land tenure</td>
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</table>

<table>
<thead>
<tr>
<th>Local/regional infrastructure</th>
<th>Local services/utilities</th>
<th>Changes in demand for power, water, sewerage etc, provision and management of facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport infrastructure</td>
<td>Access for workforce, import/export of materials, roads, rail, port facilities, airstrips, fuel management, river access, national highways</td>
<td></td>
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<tr>
<td>Housing</td>
<td>Availability and cost of housing in community, impacts of construction of new residences</td>
<td></td>
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<tr>
<td>Recreational facilities</td>
<td>Pressure on existing recreational facilities and locations, changes in access</td>
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<tr>
<th>Physical environment</th>
<th>Water</th>
<th>Demand on local water sources, discharges, competition with other</th>
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<tbody>
<tr>
<td>Other natural resources</td>
<td>Flora and fauna impacts, rehabilitation practices, physical degradation</td>
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<tr>
<td>Environmental amenity</td>
<td>Impacts on other industries, neighbours, noise and vibration etc.</td>
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<thead>
<tr>
<th>Govt. and other stakeholders</th>
<th>Local/Regional/National governments</th>
<th>Levels of regional and national government, roles of different government departments, presence of local officials, corruption, regulation, taxes and royalties, planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO's</td>
<td>Campaigns, aid organisations, environmental NGO's, blockades, partnerships, roundtables, Church groups</td>
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Community health and safety
Local and regional public health issues

In developing countries, public health issues often figure prominently when considering large development projects in remote locations. The presence of endemic and destructive diseases such as malaria or AIDS can be a source of both risk and opportunity. Even in 'developed' economies, there are some public health issues associated with lifestyles and ageing workforces that we should consider.

Factors to think about

• Endemic local or regional health issues e.g. malaria, AIDS, diabetes
• Extent of workforce migration and commuting
• Source of workforce
• Degree of isolation of local communities
• Local diet and food availability
• Cultural/religious attitudes to specific health issues
• Presence and level of activity of government or outside agencies e.g. NGO’s
• Workforce living arrangements

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

| The influx of sex workers associated with mining workforce has introduced STD’s into remote communities in PNG and other countries | Possible? |
| The incidence of malaria in the Porgera region has increased because of the influx of workers from lowland areas carrying the disease. | Possible? |
| Increased movement of people introduces/promotes spread of diseases to other communities | Possible? |
| Change in availability and nature of food for community and workforce leads to lifestyle diseases such as diabetes, obesity | Possible? |
| High levels of absenteeism and turnover due to endemic diseases e.g. malaria, AIDS | Possible? |
| Adverse impact on diet due to loss of traditional food production/gathering skills and knowledge | Possible? |
| Closure leads to drop in public health levels due to re-emergence of disease, changes in diets and loss of traditional knowledge | Possible? |

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ……………………………………

If more than low, what are the main sources of risk?

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<tr>
<th>Examples of opportunities to make a positive difference</th>
<th>Possible?</th>
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<tbody>
<tr>
<td>Generate improvements in local diet and nutritional standards through support of education campaigns and clinics</td>
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<tr>
<td>Treatment and control of diseases that place considerable burden on local communities e.g. filariasis elimination by Placer/MML, yaws treatment programs run by Ok Tedi in communities on the Fly River</td>
<td></td>
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<tr>
<td>Increase community health awareness</td>
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*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme ...........................................

*If more than low, what are the main sources of these opportunities?*

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**Case Study – example from global operations**

- Description of program
- Reasons for success
- How did it add value?
Community Risks and Opportunities – a Site-Level Tool

Community health and safety
Health services and facilities

Due to the need to ensure appropriate health services and facilities for the workforce and their families, mining operations often provide additional infrastructure such as hospitals and clinics. These can be an important resource for the broader community, but maintaining them on an ongoing basis can also be a significant challenge.

Factors to think about

- Existing standard of health services & facilities
- Social effects of improving health services & facilities
- Additional facilities required due to population increase
- Role and performance of government in providing services
- Presence and activities of outside agencies e.g. NGO’s

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

| Overreliance on mine to provide health services to the community | Possible? |
| Health infrastructure and services not maintained after mine closure | |
| Loss of traditional medical knowledge and treatment methods due to introduction of ‘Western’ medicine | |
| Migration of people to the mine area for access to improved health facilities leading to overcrowding, social problems and strained resources. | |
| Different standards of health care for mine workforce and general community causes tension | |

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme …………………………………..

If more than low, what are the main sources of risk?

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<tr>
<td>Provide/support community health extension services</td>
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<tr>
<td>Build local capacity to deliver services and maintain facilities</td>
<td></td>
</tr>
<tr>
<td>Provide access to emergency facilities &amp; services through mine e.g. air evacuation via Ok Tedi helicopter</td>
<td></td>
</tr>
<tr>
<td>Provide health training opportunities to locals e.g. scholarships</td>
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</table>

*How would you initially rate the overall potential to make a positive difference in this area?*

*Negligible, Low, Medium, High or Extreme .................................*

*If more than low, what are the main sources of these opportunities?*

**Case Study – example from global operations**

- Description of program
- Reasons for success
- How did it add value?
Community Risks and Opportunities – a Site-Level Tool

Community health and safety

Community safety and environmental health

Mining operations can represent a direct hazard to the community through issues such as increased traffic and risks associated with explosives and mining voids on lease areas. Indirect threats to community health through discharges and emissions from processing operations can also figure prominently in community concerns, regardless of the levels involved. Conversely, operations can also positively influence community behaviour in areas of safety and community health that are not associated with company activities.

Factors to think about

- Methods of transporting people and materials for mine operations
- Location of operations with respect to the community
- Security of lease and ease of access
- Nature, method, volume and concentrations of emissions and discharges
- Local food sources and chains
- Other local sources of contaminants

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

<table>
<thead>
<tr>
<th>Example</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine-related traffic accidents involving community members</td>
<td></td>
</tr>
<tr>
<td>Safety incidents involving community members accessing lease e.g. illegal miners at Porgera</td>
<td></td>
</tr>
<tr>
<td>Spills of hazardous materials in areas accessed by community e.g. mercury spill by contractor at Yanacocha</td>
<td></td>
</tr>
<tr>
<td>Theft of hazardous materials from mine operations/contractors e.g. explosives</td>
<td></td>
</tr>
<tr>
<td>Emissions or discharges impact on public health</td>
<td></td>
</tr>
<tr>
<td>Discharges impact on community food resources e.g. fishing grounds, lead in soil</td>
<td></td>
</tr>
<tr>
<td>Company wrongly blamed for presence of contaminants or public health problems</td>
<td></td>
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</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ........................................

If more than low, what are the main sources of risk?

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### Community Risks and Opportunities – a Site-Level Tool

**Examples of opportunities to make a positive difference**

<table>
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<tr>
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</table>

- Improve traffic safety infrastructure and standards in community/region
- Develop positive safety culture in the community
- Facilitate clean-up of other sources of contaminants
- Educate community regarding use of potential contaminants e.g. mercury, agricultural chemicals
- Establish community health monitoring system

*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme

*If more than low, what are the main sources of these opportunities?*

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Community Risks and Opportunities – a Site-Level Tool

Social change
Demographic changes

A mining operation is invariably the cause of a number of demographic changes, which will have flow-on effects for local and regional communities. Even for smaller operations with a non-residential workforce, some changes for host communities may be significant.

Factors to think about

- Existing population profile (age, gender etc.)
- Size of possible population changes with respect to existing communities
- Composition of workforce and in-migrating population

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

| Large scale in-migration to area leading to unplanned population increases |  |
| Racial or ethnic tensions created or exacerbated by influx of people from other groups and areas. |  |
| Gender imbalance due to influx of mainly male workforce |  |
| Communities lose population and viability due to closure/downsizing |  |
| Growth of illegal housing on outskirts of mine (e.g. shantytowns) |  |

How would you initially rate the overall risk of negative impacts in this area?
Negligible, Low, Medium, High or Extreme ……………………………………

If more than low, what are the main sources of risk?

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Community Risks and Opportunities – a Site-Level Tool

### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Description of opportunity</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rejuvenate local population by providing incentives for mine workers and families to reside in local communities</td>
<td></td>
</tr>
<tr>
<td>Adopt employment policies aimed at increasing female representation in the mining workforce</td>
<td></td>
</tr>
<tr>
<td>Implement employment initiatives to encourage young people to stay in community</td>
<td></td>
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</tbody>
</table>

How would you initially rate the overall potential to make a positive difference in this area?
Negligible, Low, Medium, High or Extreme ..................................................

If more than low, what are the main sources of these opportunities?

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#### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Community Risks and Opportunities – a Site-Level Tool

Social change
Community cohesion and identity

The social changes introduced by a mining operation can impact on the sense of identity and cohesion of local communities in both positive and negative ways. Divisive issues such as the presence of a migrant workforce and certain working time arrangements are balanced by opportunities to positively contribute to community identity and function.

Factors to think about

- Size, composition and diversity of community
- Presence and strength of community groups and organisations
- History of community

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

<table>
<thead>
<tr>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Social changes resulting from the presence of the mine weaken traditional power structures.</td>
</tr>
<tr>
<td>Discrepancy between higher paid mining workers and lower paid workers in the community generates social tensions</td>
</tr>
<tr>
<td>Community’s sense of identity and traditional values are undermined by demographic and economic changes resulting from establishment of mining development</td>
</tr>
<tr>
<td>Uneven distribution of costs and benefits between different community groups (e.g. royalty payments, employment opportunities) generates tensions</td>
</tr>
<tr>
<td>Imported workers and other in-migrants introduce different lifestyles and patterns of behaviour, generating tension</td>
</tr>
<tr>
<td>Imported labour force creates resentment in community</td>
</tr>
<tr>
<td>Working time arrangements (e.g. 12 hour shifts and continuous rosters in residential operations) reduce ability of people to participate in community activities.</td>
</tr>
<tr>
<td>Community’s sense of identity and traditional values are undermined by demographic and economic changes resulting from downsizing or closure of mine</td>
</tr>
</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme

If more than low, what are the main sources of risk?
### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Description</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage involvement of mine personnel in local organisations</td>
<td></td>
</tr>
<tr>
<td>Support capacity-building of local organisations</td>
<td></td>
</tr>
<tr>
<td>Promote community-building activities e.g. festivals, provision of community</td>
<td></td>
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<tr>
<td>facilities such as meeting hall</td>
<td></td>
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<tr>
<td>Facilitate conflict resolution initiatives</td>
<td></td>
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</table>

How would you initially rate the overall potential to make a positive difference in this area?

Negligible, Low, Medium, High or Extreme ........................................

If more than low, what are the main sources of these opportunities?

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Mines usually highlight the generation of community education and training opportunities as a significant benefit of the presence of an operation. These are balanced by risks associated with raising expectations too high, and failing to deliver targets in areas such as Indigenous employment.

Factors to think about

- Current levels of education and training
- Community attitudes towards education and training
- Existing education and training infrastructure

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strain on local education facilities due to increase in population</td>
<td></td>
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<tr>
<td>Decline in school population when mine downsizes/closes leads to reduction in education services</td>
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</tr>
<tr>
<td>Mine contributes to decline in local school population e.g. due to purchase of neighbouring properties</td>
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<tr>
<td>Education and training improvement initiatives implemented or supported by the mine not maintained.</td>
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<tr>
<td>Outward migration of skilled-up locals, changing the demographics of the local community.</td>
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<tr>
<td>Failure to address cultural sensitivities may lead to the failure of education and training initiatives</td>
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<tr>
<td>Unequal access to training opportunities causes social conflict</td>
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<tr>
<td>People who receive mine-related training fail to obtain employment, creating disillusionment in the community (e.g. Century)</td>
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How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme  .........................

If more than low, what are the main sources of risk?

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## Examples of opportunities to make a positive difference

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<thead>
<tr>
<th>Possible?</th>
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<tbody>
<tr>
<td>Improve local education facilities and services</td>
</tr>
<tr>
<td>Improve skills of local teachers and educators</td>
</tr>
<tr>
<td>Implement or support initiatives to improve levels of school attendance e.g. school bus, school-based nutritional programs</td>
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<tr>
<td>Establish scholarship/bursary schemes for local students</td>
</tr>
<tr>
<td>Improve skill-base of local community through apprenticeship and trainee programs</td>
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<tr>
<td>Support community adult education initiatives</td>
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How would you initially rate the overall potential to make a positive difference in this area?
Negligible, Low, Medium, High or Extreme .................................

If more than low, what are the main sources of these opportunities?

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Social change
Local political environment

Existing community political structures and relationships are likely to be disturbed by a new mining operation.

Factors to think about

- Existing local political structure and culture
- Capacity of community to engage with mining operations
- Involvement of workforce in local political life

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

| Significant elements of local community oppose mine |   |
| Changes due to mining alter local political structure leading to disenfranchisement of some groups e.g. women |   |
| Increased opportunities for corruption/excessive influence by political figures |   |
| Mine becomes a ‘political football’ for opposing political groups |   |
| Increased political conflict within community |   |
| Local political structures and processes not suited for dealing with issues related to mining operations e.g. planning decisions |   |

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme .................................

If more than low, what are the main sources of risk?

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### Examples of opportunities to make a positive difference

<table>
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<tr>
<th>Support initiatives to develop skills and capabilities of local political leaders e.g. training on governance</th>
<th>Possible?</th>
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*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme ............................

*If more than low, what are the main sources of these opportunities?*

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Community Risks and Opportunities – a Site-Level Tool

Social change
Crime and social order

The presence of a large well-paid workforce can result in an increase in certain types of crime and disorderly conduct, particularly in dynamic periods such as the construction of a new operation. Practical initiatives to address some issues can go far beyond the areas of direct impact of the mining operation.

Factors to think about

- Existing levels of crime and disorder
- Strength of social controls
- Effectiveness of policing institutions
- Extent of likely social disruption resulting from mining development

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

| Increased violence and disorder due to greater availability of alcohol | Possible? |
| Opportunities created for property crime e.g. burglary and theft |
| Violent conflict between different groups living in or attracted to the community |
| Introduction of new or intensified social problems due to changes in recreational pursuits e.g. influx of a large number of male mine workers – growth of bars/alcohol, prostitution and subsequent consequences. |
| Criminal groups attracted to area due to opportunities e.g. illegal brothels, drug trafficking |

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ..........................................................

If more than low, what are the main sources of risk?

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Community Risks and Opportunities – a Site-Level Tool

Examples of opportunities to make a positive difference

| Support community crime prevention initiatives (e.g. neighbourhood watch, domestic violence programs) |
| Incorporate crime prevention design principles in construction of mine-related housing and associated environments |
| Provide or support alternative activities for groups at risk of offending e.g. juveniles |

How would you initially rate the overall potential to make a positive difference in this area?
Negligible, Low, Medium, High or Extreme ……………………………………

If more than low, what are the main sources of these opportunities?
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Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Social change
Security forces

The use of government security forces to protect private mining operations in remote locations can be a source of controversy and some difficulty for both company and local communities. Several recent high profile examples from Africa, Indonesia and PNG highlight the complexities involved.

Factors to think about

- Level of local / regional instability
- Presence of illegal mining activity
- History of security force involvement in area
- Government requirements relating to provision of security
- Standard of security forces e.g. human rights record, training, leadership

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

| Possible? |
|------------------|------------------|
| Human rights abuses by security forces |                |
| Conflict between security forces and local communities |                |
| Presence and use of security forces may increase internal conflict / tensions in the communities |                |
| Mine employees and property not adequately protected due to deficiencies in security e.g. under-resourcing, corruption |                |
| Some sections of the community receive better protection than others leading to community dissatisfaction |                |
| Level of security in a mining town is not maintained upon closure |                |
| Use of company resources by government security forces attracts negative attention |                |
| Use of Anvil Mining trucks by government troops in anti-rebel operation which resulted in civilian deaths was highlighted in the international press. |                |

How would you initially rate the overall risk of negative impacts in this area?
Negligible, Low, Medium, High or Extreme .................................

If more than low, what are the main sources of risk?


### Community Risks and Opportunities – a Site-Level Tool

#### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Support human rights training for security forces in region</th>
<th>Possible?</th>
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**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme .................................

**If more than low, what are the main sources of these opportunities?**

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
There are few areas where some degree of cultural heritage associated with extended habitation of the landscape does not exist. It is a significant issue for many Indigenous communities that retain strong cultural links to traditional land. It can also be relevant in other contexts such as historical mining districts.

### Factors to think about

- Presence of cultural heritage sites
- Legislative framework for cultural heritage protection
- Knowledge and expertise in cultural heritage management

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites or areas of cultural significance (including landscapes) may be damaged or destroyed by mining-related activity</td>
<td></td>
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<tr>
<td>Local traditions and culture are weakened by influx of people</td>
<td></td>
</tr>
<tr>
<td>Loss of community access to culturally significant sites</td>
<td></td>
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</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme …………………………………..

If more than low, what are the main sources of risk?

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### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Build capacity of communities to protect and promote cultural heritage</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preserve/highlight local heritage e.g. Cannington and Cadia</td>
<td></td>
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</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme ...........................

**If more than low, what are the main sources of these opportunities?**

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Social change
Indigenous communities

Interactions between mining operations and Indigenous communities have often been a source of problems, complicated by the influence of relevant legislation. More recently many companies and communities have tried to work together to mutual advantage through formal agreements such as Indigenous Land Use Agreements, as well as less formal approaches.

Factors to think about

- Presence & prominence of Indigenous community in area
- Capacity of communities to deal with mining developments (previous exposure and experience)
- Existence of formal Indigenous groups e.g. Lands Council
- National and provincial legislative and policy framework regarding Indigenous rights and interests

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

<table>
<thead>
<tr>
<th>Example</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous community does not consent to development</td>
<td></td>
</tr>
<tr>
<td>Company misidentifies Traditional Owners, overlooks groups</td>
<td></td>
</tr>
<tr>
<td>Presence of mine changes power dynamics in community – increased internal conflict, less respect for elders etc</td>
<td></td>
</tr>
<tr>
<td>Loss of a reasonable level of access to areas of cultural significance on mining lease</td>
<td></td>
</tr>
<tr>
<td>Increased access to Indigenous land by third parties e.g. hunters, illegal loggers</td>
<td></td>
</tr>
<tr>
<td>Introduction of new influences undermines traditional culture</td>
<td></td>
</tr>
<tr>
<td>Lack of effective governance structures to manage royalties and benefits appropriately</td>
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</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ........................................

If more than low, what are the main sources of risk?

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## Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage maintenance/revival of cultural traditions e.g. support cultural troupes, establishment of arts centres</td>
<td></td>
</tr>
<tr>
<td>Provide training and employment opportunities for Indigenous community members</td>
<td></td>
</tr>
<tr>
<td>Facilitate Indigenous enterprises through interactions and contracts with the mining operation e.g. tourism ventures</td>
<td></td>
</tr>
<tr>
<td>Utilise traditional knowledge in management of mine lands</td>
<td></td>
</tr>
<tr>
<td>Take positive action to preserve cultural heritage items e.g. establish a “keeping place” for artefacts</td>
<td></td>
</tr>
<tr>
<td>Provide infrastructure on closure to support Indigenous communities</td>
<td></td>
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<tr>
<td>Improve workforce awareness of Indigenous communities and rights e.g. Argyle smoking ceremony</td>
<td></td>
</tr>
</tbody>
</table>

How would you initially rate the overall potential to make a positive difference in this area?

Negligible, Low, Medium, High or Extreme ........................................

If more than low, what are the main sources of these opportunities?

Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Some mining operations will require resettlement of people, ranging from single dwellings to entire villages. In some cases squatters or illegal miners may also be involved. Often a source of controversy, voluntary resettlement does also offer opportunities for effecting significant positive outcomes.

**Factors to think about**

- History of region
- Presence of cultural/religious sites
- Nature and size of communities involved
- Legal rights to land

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

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**Examples of risks – what could go wrong?**

<table>
<thead>
<tr>
<th>Possible?</th>
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<tbody>
<tr>
<td>Negligible, Low, Medium, High or Extreme</td>
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</tbody>
</table>

- Affected groups do not consent to resettlement e.g. Tambogrande proposal in Peru foundered due to community opposition.
- Resettlement plans creates tension and disagreement in community e.g. proposals at Rosia Montana in Romania have divided villages.
- Resettled communities are disadvantaged e.g. loss of livelihood, reduction in living conditions
- Resettlement of small-scale miners to make way for large scale development results in conflict and controversy e.g. Bulyanhulu in Tanzania

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme

If more than low, what are the main sources of risk?
Community Risks and Opportunities – a Site-Level Tool

Examples of opportunities to make a positive difference

| Establishment of alternative, more sustainable livelihoods for resettled groups |
| Partner with NGO’s or International agencies to promote improvements in net welfare of affected groups |
| Use resettlement as an opportunity to showcase appropriate models of development e.g. community layout, housing, use of materials |

How would you initially rate the overall potential to make a positive difference in this area?
Negligible, Low, Medium, High or Extreme ……………………………………

If more than low, what are the main sources of these opportunities?

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Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Mines often represent the single largest employer in the region. They can therefore induce significant changes in local labour markets, with potential flow-on economic and social effects. The balance between local employment programs and the use of imported labour can generate many risks and opportunities.

Factors to think about

- Extent of existing labour pool in relevant communities
- Levels of unemployment
- Size of operation and extent to which labour is sourced locally
- Dependence of other industries/activities on labour
- Relativities of pay rates

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

<table>
<thead>
<tr>
<th>Possible?</th>
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<tbody>
<tr>
<td>Demand from mining operation creates labour shortages in local community leading to wage inflation, chronic skill shortages, etc</td>
</tr>
<tr>
<td>Closure/downsizing of operation creates a labour surplus leading to unemployment, wage reductions etc.</td>
</tr>
<tr>
<td>Other industries in area are unable to compete for labour, leading to a reduction in economic diversity</td>
</tr>
<tr>
<td>Local labour market is unable to meet operation’s requirements</td>
</tr>
<tr>
<td>Mining operation does not meet local expectations with respect to the creation of job opportunities</td>
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How would you initially rate the overall risk of negative impacts in this area?

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If more than low, what are the main sources of risk?

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### Examples of opportunities to make a positive difference

<table>
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<tr>
<th>Possible?</th>
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<tbody>
<tr>
<td>Provide skills and job readiness training to local population to expand the local labour pool</td>
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<tr>
<td>Work with suppliers to generate local training and employment opportunities</td>
</tr>
<tr>
<td>Facilitate the development of other economic activities (e.g. tourism, horticulture) to provide employment when the mine closes or downsizes</td>
</tr>
<tr>
<td>Develop a mobile mining workforce which can find other mining related employment post-closure</td>
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</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme .................................

If more than low, what are the main sources of these opportunities?

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### Case Study – example from global operations

- Description of program
- Reasons for success
- How did it add value?
Community Risks and Opportunities – a Site-Level Tool

Local/regional economy
Local economy

The cash flows associated with a mining operation, both in terms of wages and purchasing of supplies, will often dominate local economies. While this can generate short term benefits, the impacts can also adversely impact other existing industries. Recognising and planning for all associated short and long term impacts is an important aspect.

Factors to think about

- Existing industries in the region
- Profile of mining in region and supporting industries in the region
- Cumulative impacts of other mining operations

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

<table>
<thead>
<tr>
<th>Opposite to mine from existing industries</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased viability/profitability of other local industries e.g. tourism</td>
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<tr>
<td>Reduced diversity of regional economy</td>
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<tr>
<td>Lack of supporting industries for a 'greenfield' site</td>
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<tr>
<td>Increased competition for existing infrastructure and services e.g. water</td>
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<tr>
<td>Supporting industries are not sustained beyond closure</td>
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<tr>
<td>Mining activity prevents other uses of land</td>
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<tr>
<td>Local economy collapses/deteriorates approaching closure</td>
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<tr>
<td>Increased local prices/high inflation or hyper inflation</td>
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</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme …………………………………

If more than low, what are the main sources of risk?

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## Examples of opportunities to make a positive difference

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- Increase linkages with existing industries (e.g. provision of services to the mine, synergies)
- Attract supporting industries to the region
- Provide assistance to support the creation of new businesses
- Facilitate business development training for local community

*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme ……………………………………………

*If more than low, what are the main sources of these opportunities?*

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Community Risks and Opportunities – a Site-Level Tool

**Local/regional economy**

Management of taxes and royalties

Mining operations usually contribute significant revenue to national and regional governments through taxes and royalty payments. However, a recurring theme is the perceived lack of government investment in infrastructure and services for local communities.

**Factors to think about**

- Existing royalty arrangements
- Relationships between levels of government
- Facilities such as tax-credit schemes
- Community expectations

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?  Possible?

| Community expectations exceed the amount of funding available, leading to frustration, resentment and conflict | Possible? |
| Unequal division of taxes and royalties among levels of government: local communities perceive not getting fair share of royalties and taxes from mine | |
| Corruption prevents benefits flowing to designated communities | |
| Perceived unequal distribution of taxes and royalties between different communities creates conflict | |
| Projects funded by royalty payments are not sustained once royalties cease | |
| Royalty payments not used to benefit community | |

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ……………………………………

If more than low, what are the main sources of risk?

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**Examples of opportunities to make a positive difference**

<table>
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<tr>
<th>Possible?</th>
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<tbody>
<tr>
<td>Create trusts to manage royalty incomes</td>
</tr>
<tr>
<td>Improve capacity of communities to use royalty incomes to support projects that have long term benefits</td>
</tr>
<tr>
<td>Structure payments to increase chances of continued funding for projects e.g. invest a portion into a capital fund to fund maintenance and replacement of assets in the future.</td>
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</tbody>
</table>

*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme

*If more than low, what are the main sources of these opportunities?*

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The traditional livelihoods of communities in the vicinity of a mining operation can be impacted in a number of ways. Movement of sections of the workforce to mining activities can result in difficulties, while carefully-planned programs can enhance post-mining outcomes.

**Factors to think about**

- Nature, size and diversity of local economy
- Extent of community reliance on traditional livelihoods
- Types of traditional livelihoods

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local recruitment for mine operation removes labour pool for supporting traditional livelihoods.</td>
<td></td>
</tr>
<tr>
<td>Long term loss of skills and knowledge (e.g. in farming, fishing) due to shift to mine-related employment.</td>
<td></td>
</tr>
<tr>
<td>Access to land is cut-off by the mining operation, preventing activities such as the use of gardens for local food sources.</td>
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<tr>
<td>Mining activities damage traditional food sources (e.g. fishing grounds)</td>
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</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme

If more than low, what are the main sources of risk?
<table>
<thead>
<tr>
<th>Examples of opportunities to make a positive difference</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner with other organisations on livelihood projects</td>
<td></td>
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<tr>
<td>Use rehabilitation as an opportunity to establish new livelihoods (e.g. creation of sustainable forest resource)</td>
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How would you initially rate the overall potential to make a positive difference in this area?

Negligible, Low, Medium, High or Extreme .................................

If more than low, what are the main sources of these opportunities?

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Community Risks and Opportunities – a Site-Level Tool

Local/regional economy
Artesanal mining

Small-scale or artesanal mining of high value minerals such as gold often occurs in the vicinity of proposed or existing larger scale operations. Both local communities and migrant workforces can be involved, and there are a number of high profile cases where conflict between companies and communities has developed. Equally, there are some good examples where co-operative approaches have improved small-scale mining practices, particularly in the areas of safety and environmental management.

Factors to think about

- Prevalence of small-scale mining in region and on or near lease
- Local community involvement in small-scale mining
- Level of organisation of small-scale mining activity
- Small-scale mining laws and legislation

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

| Poor legacy of small-scale mines (e.g. poor safety record & environmental destruction) leads to a negative disposition towards new larger-scale mining operation | Possible? |
| Loss of livelihood for existing small-scale miners |  |
| Exploration activities for large-scale mining development leads to conflict with small-scale operators |  |
| Opening up of resource attracts illegal mining and trading (e.g. gold mines) |  |
| Illegal miners on lease exposed to safety hazards resulting in injury or death e.g. accessing pit walls at Porgera |  |
| Clashes between security forces and illegal miners results in community tension, injuries, international attention |  |
| Environmental damage caused by small scale miners attributed to company e.g. mercury levels in fish |  |

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ...........................................

If more than low, what are the main sources of risk?

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### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide technical know-how, information and equipment to small-scale miners</td>
<td></td>
</tr>
<tr>
<td>Open deposits or areas of lease not deemed suitable for large scale development to small-scale miners</td>
<td></td>
</tr>
<tr>
<td>View small-scale miners as a recruitment source for new operation</td>
<td></td>
</tr>
<tr>
<td>Help to establish or sponsor small-scale central processing plants</td>
<td></td>
</tr>
<tr>
<td>Provide access to emergency services</td>
<td></td>
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<tr>
<td>Buy and treat tailings</td>
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</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme ...........................................

If more than low, what are the main sources of these opportunities?

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Local/regional economy

Land tenure

The development of mining leases over areas that have other forms of ownership or legal rights has often been a source of conflict in the past. There are large variations in approaches to this subject between different countries.

Factors to think about

- Land values and existing land uses
- Presence and status of existing lease arrangements
- Patterns of traditional ownership
- Legal recognition of traditional rights and interest in land

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation of excessive claims for compensation</td>
<td></td>
</tr>
<tr>
<td>Landowners refuse to sell requiring exercise of compulsory acquisition powers</td>
<td></td>
</tr>
<tr>
<td>Misidentification of traditional owners</td>
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<tr>
<td>Reduction in land values due to proximity to mine</td>
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<tr>
<td>Damage to adjoining land e.g. subsidence</td>
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</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ..........................

If more than low, what are the main sources of risk?

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### Community Risks and Opportunities – a Site-Level Tool

**Examples of opportunities to make a positive difference**

<table>
<thead>
<tr>
<th>Support initiatives to clarify land tenure e.g. survey</th>
<th>Possible?</th>
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<tbody>
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**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme .................................

**If more than low, what are the main sources of these opportunities?**

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In some areas the additional demand caused by mines and their workforce will generate significant pressure on existing services. In other more remote areas, a mining operation can become the de facto supplier of such services.

### Factors to think about

- Availability and capacity of local services / utilities
- Cost and consistency of supply
- Size of population changes attributable to mine
- Levels of demand and use
- Local regulatory capacity and policies

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased strain on utilities (power/water, waste disposal) due to increase in population</td>
<td></td>
</tr>
<tr>
<td>Overreliance on mine to provide and maintain services / utilities</td>
<td></td>
</tr>
<tr>
<td>Increased competition for scarce resource or service, e.g. water, results in price increases or reduced availability for non-mine users</td>
<td></td>
</tr>
<tr>
<td>Relevant government authorities lack resources and/or capacity to meet additional demands on infrastructure</td>
<td></td>
</tr>
<tr>
<td>Community groups disrupt operations by targeting infrastructure</td>
<td></td>
</tr>
<tr>
<td>Loss of or deterioration of infrastructure post-closure results in decreased services for local community</td>
<td></td>
</tr>
<tr>
<td>Drought conditions can result in tensions between local communities and mining companies regarding the impact of mine activities on water supplies</td>
<td></td>
</tr>
</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

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### Community Risks and Opportunities – a Site-Level Tool

**Examples of opportunities to make a positive difference**

<table>
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</table>

- Improve quality & reliability of supply of services to communities (e.g. clean water supply, sanitation)
- Develop local / regional waste recycling and disposal systems
- Develop local business and employment opportunities to provide and maintain services
- Development of sustainable infrastructure for communities
- Century Mine accepts waste from the nearby National Park for processing at its own waste management facility.

How would you initially rate the overall potential to make a positive difference in this area?
- Negligible, Low, Medium, High or Extreme …………………………………..

If more than low, what are the main sources of these opportunities?

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Mining operations require large-scale, efficient transport options for both people and materials. They therefore have the potential to improve significantly existing infrastructure in areas where it might be deficient. However, upgraded and busier transport corridors can be a source of risk and community concern as well.

### Factors to think about

- Existing infrastructure
- Level of use during and following mine operation
- Regional planning frameworks
- Capacity of community/government to maintain infrastructure

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

### Examples of risks – what could go wrong?  
**Possible?**

<table>
<thead>
<tr>
<th>Event</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>New/improved road access leads to uncontrolled in-migration e.g. settlements along Ok Tedi highway.</td>
<td></td>
</tr>
<tr>
<td>Increased access to sensitive environmental / cultural areas damages values associated with the area e.g. logging activities from mine access roads</td>
<td></td>
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<tr>
<td>Overreliance on mine to provide and maintain transport infrastructure for the community</td>
<td></td>
</tr>
<tr>
<td>Decreased amenity values of areas around transportation corridors (e.g. increased dust and noise levels)</td>
<td></td>
</tr>
<tr>
<td>Community groups disrupt operations by targeting infrastructure e.g. road blockades at Porgera.</td>
<td></td>
</tr>
<tr>
<td>Community dissatisfaction due to lack of access to mine transport infrastructure e.g. airstrips</td>
<td></td>
</tr>
<tr>
<td>Transport infrastructure deteriorates post-closure</td>
<td></td>
</tr>
<tr>
<td>Community develops expectation that infrastructure will be maintained indefinitely</td>
<td></td>
</tr>
</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?  
*Negligible, Low, Medium, High or Extreme*  

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### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve access for isolated communities</td>
</tr>
<tr>
<td>Facilitate community’s ability to transport goods and produce through use of company infrastructure e.g. use of company barges for movement of produce to market in the Philippines.</td>
</tr>
<tr>
<td>Facilitate tourist access to remote areas e.g. use of Argyle airstrip for tour groups.</td>
</tr>
<tr>
<td>Develop local capacity in transport infrastructure construction, maintenance &amp; supporting services (e.g. local road works enterprise, emergency response)</td>
</tr>
<tr>
<td>Make mine transport infrastructure available to support post-mine economic projects such as tourism</td>
</tr>
</tbody>
</table>

*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme .................................

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Community Risks and Opportunities – a Site-Level Tool

Local/regional infrastructure

Housing

Availability and pricing of housing for residential workforces is often a focus for new operations. Mines can generate very large housing market ‘bubble’ effects in established communities, but can also be the catalyst for improvements.

Factors to think about

- Proximity of housing areas to mine
- Housing availability & future requirements
- Size and strength of local housing market
- Level of regional mining activity

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing shortages due to influx of workforce and in-migration</td>
<td></td>
</tr>
<tr>
<td>Lack of capacity of local housing industry to support required expansion</td>
<td></td>
</tr>
<tr>
<td>Lack of suitable land for housing developments</td>
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<tr>
<td>Poor standard or unsuitability of local housing stock impacts adversely on recruitment and retention</td>
<td></td>
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<tr>
<td>Conflict within workforce and/or community due to variable standards of housing</td>
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<tr>
<td>Reduced affordability of housing due to demand pressures or activities of speculators e.g. Central Queensland coal towns during boom period</td>
<td></td>
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<tr>
<td>Negative impact on property values due to proximity to mine or transport corridor</td>
<td></td>
</tr>
<tr>
<td>Damage to housing due to mining activities e.g. subsidence, blasting</td>
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<tr>
<td>Housing market adversely affected by downsizing/closure</td>
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</tbody>
</table>

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### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Description</th>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Develop local business and employment opportunities to service the housing market</td>
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<tr>
<td>Improve community housing stock by setting high standards for company housing e.g. Anglo Coal approach in Moranbah</td>
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</tr>
<tr>
<td>Make unused or rehabilitated areas available for new housing developments</td>
<td></td>
</tr>
<tr>
<td>Accommodation facilities and housing made available for local community purposes when no longer required by mine</td>
<td></td>
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</tbody>
</table>

*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme .................................

*If more than low, what are the main sources of these opportunities?*

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Competition for limited recreational facilities between an imported workforce and established community can result in conflict and/or overuse of a facility. Conversely, there are now a number of examples where mine closure initiatives have established new and improved facilities for the community.

**Factors to think about**

- Existing recreational facilities and usage patterns
- Recreational interests of mine personnel/families and community
- Local land ownership and management

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

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**Examples of risks – what could go wrong?**

<table>
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<th>Possible?</th>
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<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased demand leads to pressure on local recreation facilities / areas</td>
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<tr>
<td>Conflict between community and mine personnel/families over use of recreational areas and facilities</td>
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<tr>
<td>Recreational areas such as beaches suffer environmental degradation due to increased use</td>
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</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

*Negligible, Low, Medium, High or Extreme* …………………………………..

If more than low, what are the main sources of risk?

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### Community Risks and Opportunities – a Site-Level Tool

#### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Fund/build/provide recreation facilities (e.g. swimming pool, walking tracks)</td>
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<table>
<thead>
<tr>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Make mine-site recreational facilities (such as swimming pool, gym, tennis courts) available for local communities or by tourism ventures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Support/undertake rehabilitation of recreational areas e.g. BMA have assisted beach restoration projects near their coal loading facilities at Hay point, with several operational personnel involved on a voluntary basis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Develop new recreational facilities or areas as part of closure program e.g. Kennecott Copper in the US backfilled the Flambeau mine and established a nature reserve with public access and walking trails over the top of the former mine.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible?</th>
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</thead>
<tbody>
<tr>
<td>Coal operations near Collie in Western Australia won a 2005 industry award for establishing community facilities including motorsports areas and recreational lakes in rehabilitated mined lands.</td>
</tr>
</tbody>
</table>

*How would you initially rate the overall potential to make a positive difference in this area?*

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Community Risks and Opportunities – a Site-Level Tool

Physical environment
Water

The impact of mining activities on water resources is often of high concern to local communities. Competition for water in scarce environments and issues resulting from management of wastes (tailings, rock dumps etc) can be very significant. Various opportunities exist for realising beneficial outcomes as well.

Factors to think about

• Sources and availability
• Other users
• Current and anticipated demand levels
• Existing water quality
• Regulatory framework

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

<table>
<thead>
<tr>
<th>Mining operation seen as contributing to local scarcity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining operation displaces other water users</td>
<td></td>
</tr>
<tr>
<td>Damage or loss of functions of water courses and aquifers</td>
<td></td>
</tr>
<tr>
<td>Decreased water quality due to contaminants e.g. salts, heavy metals, acid mine drainage</td>
<td></td>
</tr>
<tr>
<td>Mine is blamed for changes in water quality</td>
<td></td>
</tr>
<tr>
<td>Damage to water resources and/or riverine environment resulting from tailings disposal</td>
<td></td>
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</tbody>
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How would you initially rate the overall risk of negative impacts in this area?

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## Tables: Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Examples of opportunities to make a positive difference</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use infrastructure to improve reliability and quality of water supply.</td>
<td></td>
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<tr>
<td>Facilitate improvements in water management practices for other users e.g. bore capping, offtake maintenance, dam covers</td>
<td></td>
</tr>
<tr>
<td>Take action to address non-mine related sources of contaminants</td>
<td></td>
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<tr>
<td>Establish water efficiency synergies with other industries or mines e.g. Hunter Valley mines have implemented a trading scheme which has resulted in reduced offtake of raw water and reduced discharges.</td>
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<tr>
<td>Use of voids and dams as water storage and/or recreational facilities</td>
<td></td>
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<tr>
<td>Promote water conservation initiatives in community</td>
<td></td>
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<tr>
<td>Cadia operations provide a guaranteed flow in the local river.</td>
<td></td>
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</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme .................................

**If more than low, what are the main sources of these opportunities?**

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Community Risks and Opportunities – a Site-Level Tool

Physical environment
Other natural resources

Local communities can have very strong links to natural resource management issues (other than water) in their area. A range of risks and opportunities can arise from changes in access and populations, as well as the direct impacts associated with the mining operations.

Factors to think about

- environmental management legislation
- current land uses
- proximity of protected areas and sensitive environmental areas to mine
- size of current population and project population increase
- scale and type of mining activity undertaken

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong? Possible?

| Increase in population associated with mining development places pressure on natural resources (e.g. clearing of forests for firewood) | Possible? |
| Improved access to area puts natural resources at risk (e.g. roads open up area to loggers) | Possible? |
| Mining activities damage/destroy vegetation of value to community (e.g. vehicle movements spread dieback in forests; introduction of weeds) | Possible? |
| Mining activities lead to a loss of biodiversity (e.g. the loss of endangered/rare local species due to the removal of vegetation) | Possible? |

How would you initially rate the overall risk of negative impacts in this area?

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### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Possible?</th>
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<tbody>
<tr>
<td>Create alternative livelihood opportunities to take pressure off natural resources (e.g. provide illegal loggers with alternative employment)</td>
</tr>
<tr>
<td>Initiate action to protect sensitive natural areas (e.g. fence off endangered vegetation and/or habitats; undertake weed eradication program)</td>
</tr>
<tr>
<td>Rehabilitate disturbed land in a way that contributes to the biodiversity of the area</td>
</tr>
<tr>
<td>Support programs to educate local community on value of natural resources e.g. promote sustainable agriculture practices</td>
</tr>
<tr>
<td>Support community revegetation programs in degraded areas e.g. Hunter Valley riparian revegetation project</td>
</tr>
<tr>
<td>Use offsets to realise net improvements in biodiversity</td>
</tr>
</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

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**If more than low, what are the main sources of these opportunities?**

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**Physical environment**

**Environmental amenity**

Amenity issues such as noise and dust are often cause for complaint in populated areas. While opportunities in this area may be more limited, there may be some scope in addressing abandoned mining areas which are of concern.

### Factors to think about

- Proximity of mining and processing operations to communities
- Presence of other industries
- Community experience of mining amenity issues

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased mine-related traffic</td>
<td></td>
</tr>
<tr>
<td>Noise from mine activities e.g. trucks, processing plants</td>
<td></td>
</tr>
<tr>
<td>Dust</td>
<td></td>
</tr>
<tr>
<td>Airblast and vibration from blasting</td>
<td></td>
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<tr>
<td>Intrusive lights</td>
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</tr>
<tr>
<td>Loss of visual amenity</td>
<td></td>
</tr>
<tr>
<td>Loss of local population within vicinity of a mine (move to demographics)</td>
<td></td>
</tr>
</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme ..........................

If more than low, what are the main sources of risk?


### Community Risks and Opportunities – a Site-Level Tool

**Examples of opportunities to make a positive difference**

<table>
<thead>
<tr>
<th>Take action to reduce other sources of amenity loss not related to mine e.g rehabilitate spoil from abandoned mined lands.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
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</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

*Negligible, Low, Medium, High or Extreme* ……………………………………….

*If more than low, what are the main sources of these opportunities?*

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Relationships between mining companies, local communities and various levels of government are usually extremely complex and dynamic. Often the cause for some friction, mining operations could also provide a catalyst for resolving other issues.

### Factors to think about

- Legislative and regulatory framework
- Respective roles and responsibilities of different levels of government
- Government presence and influence in local region
- Perceived legitimacy and authority of government by local communities

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

<table>
<thead>
<tr>
<th>Examples of risks – what could go wrong?</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local opposition to national government makes mine a target for political action</td>
<td></td>
</tr>
<tr>
<td>Inadequate government expenditure in mining affected communities/regions leads to pressure on mine to provide services and infrastructure</td>
<td></td>
</tr>
<tr>
<td>Conflict between community and government over dispersion of royalties and taxes</td>
<td></td>
</tr>
<tr>
<td>Inefficient or corrupt government processes leads to delays in obtaining regulatory approvals</td>
<td></td>
</tr>
<tr>
<td>Government lacks resources to provide regulatory oversight, leading to inability to provide independent verification of company performance</td>
<td></td>
</tr>
</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme …………………………………

If more than low, what are the main sources of risk?

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### Community Risks and Opportunities – a Site-Level Tool

**Examples of opportunities to make a positive difference**

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate discussions with government on revenue sharing arrangements between local, regional and national levels</td>
<td></td>
</tr>
<tr>
<td>Provide training and educational opportunities to upskill the local/regional public service e.g. scholarships</td>
<td></td>
</tr>
<tr>
<td>Involve reputable NGO’s in providing verification of performance</td>
<td></td>
</tr>
<tr>
<td>Establish consultative mechanisms that include representatives of local, regional and national government agencies</td>
<td></td>
</tr>
</tbody>
</table>

*How would you initially rate the overall potential to make a positive difference in this area?*

Negligible, Low, Medium, High or Extreme .................................................

*If more than low, what are the main sources of these opportunities?*

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Community Risks and Opportunities – a Site-Level Tool

Civil society organisations such as NGOs are taking a prominent role in discussions on existing and potential mining operations. Partnerships to realise sustainable development outcomes are increasingly being adopted by the industry.

Factors to think about

- Size and ownership structure of mine operation (e.g. multinational companies are likely to attract more NGO interest)
- Level of interest by external organisations in operation
- Relationship of external organisations with communities

What are the main influencing factors that will affect our situation? How will these change over the lifecycle of operations?

Examples of risks – what could go wrong?

<table>
<thead>
<tr>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention by organisations critical of mining reduces support for project</td>
</tr>
<tr>
<td>Involvement of external organisations creates community conflict</td>
</tr>
</tbody>
</table>

How would you initially rate the overall risk of negative impacts in this area?

Negligible, Low, Medium, High or Extreme …………………………………

If more than low, what are the main sources of risk?

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### Examples of opportunities to make a positive difference

<table>
<thead>
<tr>
<th>Examples of opportunities to make a positive difference</th>
<th>Possible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner with external organisations to deliver community development and/or environmental improvement programs</td>
<td></td>
</tr>
<tr>
<td>Use respected NGOs to provide external verification of social and environmental performance e.g. Cannington and the North Queensland Conservation Council.</td>
<td></td>
</tr>
</tbody>
</table>

**How would you initially rate the overall potential to make a positive difference in this area?**

Negligible, Low, Medium, High or Extreme

**If more than low, what are the main sources of these opportunities?**

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3. Guidelines on engaging with external stakeholders about risks and opportunities

This document provides practical guidance to operations on how to involve community members and other external stakeholders in developing a risk and opportunity management strategy.

Taking a consultative approach is both the right thing to do and the smart thing to do. By listening to and engaging with their communities, operations will have a better understanding of what the real issues and opportunities are. Community members, for their part, will be more likely to trust an operation and be supportive of its community support programs if they perceive management as responsive and open.

The latest Australian/New Zealand Risk Management Standard (AS/NZ 4360-2004) emphasises that:

> Communication and consultation are important considerations at each stage of the risk management process. They should involve a dialogue with stakeholders with efforts focused on consultation rather than a one way flow of the information from the decision maker to other stakeholders … Since the views of stakeholders can have a significant impact on the decisions made, it is important that their perceptions of risk be identified and recorded and integrated into decision-making processes (p.11).

When and how should external stakeholders be involved?

The basic process for conducting a risk and opportunity assessment comprises three steps: pre-workshop information gathering, the workshop itself, and post-workshop follow-up and implementation. Stakeholder input should be sought in each of these stages, as shown in the table below.

A community risk and opportunity management strategy may be developed as part of a more comprehensive social impact assessment (SIA) or alternatively, may be prepared as a stand-alone exercise. The consultation process outlined below assumes that a stand-alone approach is being used. If a full-scale SIA is being conducted, the consultations will generally need to be more wide-ranging and of greater depth.

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1 This discussion follows standard industry practice and uses the term ‘stakeholder’ as shorthand for ‘interested and affected parties’.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Main tasks</th>
<th>Key stakeholders to involve</th>
<th>Aims in involving stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-workshop</td>
<td>Prepare a briefing paper for the workshop identifying potential risks and opportunities relevant to the community. Document what is currently being done – or is proposed to be done - to address these risks and opportunities.</td>
<td>Groups and individuals living in or active in, the local and regional community. Public and private organisations which are active in the community (e.g. Government agencies, church organisations). Other individuals and organisations who are knowledgeable about the community (e.g. researchers, local journalists).</td>
<td>Provide the opportunity for affected and interested groups and individuals in the community to ‘be heard’ on issues of concern to them. Ensure that the full range of community concerns, expectations and needs have been identified and understood. Communicate to stakeholders that the mining operation is responsive and cares about the community.</td>
</tr>
<tr>
<td>Workshop</td>
<td>Rank risks and opportunities. Identify possible controls.</td>
<td>Knowledgeable individuals who are not tied to particular interest groups or factions (e.g. members of local and regional planning authorities; researchers; respected community leaders).</td>
<td>Ensure that the workshop gives - and is seen to give - due weight to community perspectives. Utilise ‘expert knowledge’ about the community to help rank risks and opportunities and identify possible controls.</td>
</tr>
<tr>
<td>Post-workshop</td>
<td>Provide the community with feedback on workshop outcomes. Refine and implement management strategies for addressing prioritised risks and opportunities.</td>
<td>Sectors of the community who may be the focus of, or otherwise affected by, the proposed controls. Groups and individuals who may be able to assist in implementing these controls.</td>
<td>Keep the community informed about what is happening and what is planned. Ensure that proposed controls have the support of, and are understood by, potentially affected groups in the community. Identify and obtain ‘buy in’ from potential partners; ensure that there is alignment with other service providers.</td>
</tr>
</tbody>
</table>
Community Risks and Opportunities – a Site-Level Tool

The pre-workshop stage

In this initial stage the aims should be to:

- make contact with all relevant external stakeholders and give them the opportunity to be heard on issues that concern or interest them
- build an understanding of the community and its needs, concerns and expectations
- communicate to stakeholders that the operation cares about the community, is responsive and wants to make a positive contribution.

The specific steps to be followed in this stage are described below.

Step One: Determine who should be consulted

The primary focus should be on obtaining input from those groups, organisations and individuals residing in, or active in, the surrounding area who:

1. have the capacity to impact on current or future operations;
2. are dependent on, or likely to be affected by, the mine;
3. have influence in and over the community; and/or
4. are knowledgeable about the community.

Each operation will have its own unique stakeholder profile, but the sorts of groups who should normally be consulted when preparing a risk and opportunity assessment include:

- community leaders (both formal and informal)
- adjoining landowners and anyone else in the area whose livelihood or amenity may be impacted on by the mining operation (e.g. artisanal miners, fishermen, farmers)
- Indigenous people who have a connection to the area
- ethnic groups, clans, tribes and other groupings living in the area (including minorities and oppressed groups)
- local and regional government officials
- community service providers (e.g. churches, community health workers, schools, law enforcement officials)
- community organisations (e.g. Progress Associations, local environmental groups, Chambers of Commerce)
- NGOs that are active in the area
- employees living locally
- other individuals who are knowledgeable about the community (e.g. researchers, local journalists, school principals).

The basic rule is to be as inclusive as practical, having regard to the size and complexity of the community. It is particularly important to include marginalised groups (such as women, young people, ethnic minorities and squatters) and to engage with critics, as well as supporters, of the project.
Step Two: Decide how people will be consulted

There are many different ways of conducting consultations, including: one-on-one interviews, group discussions, public meetings, formalised focus groups, multi-stakeholder workshops, consultative committees, written communications, and surveys of various kinds. None of these techniques is inherently better than the other: rather, which ones are most suitable will depend on the situation and the characteristics of different stakeholder groups. For example, officials and community leaders will generally be comfortable participating in formal one-on-one interviews, but this may not be a good way of obtaining input from a group of Indigenous people.

In designing a consultation strategy, it is very important to select techniques that put people at ease, encourage their involvement, promote the frank exchange of information and views, and draw out a broad cross-section of opinion. The community’s own representative institutions should be recognised and used where practical, although it may also be necessary to employ additional tools where some sections of the community (e.g. women and young people) are excluded or marginalised form these processes.

Specific factors to take into account in deciding which techniques to employ include:

- how the stakeholders themselves would prefer to provide input
- what is culturally appropriate (for example, should there be separate meetings for men and women?)
- the governance structures of the community
- the size, complexity and internal dynamics of the community and its constituent groups
- standards of literacy and education
- what languages are used in the community
- the extent and nature of previous contact between the operation and its various stakeholders.

See the resources listed at the end of this document for further advice on managing these and related issues.

Step Three: Conduct the consultations

When conducting consultations be sure to inform people at the outset about why their input is being sought, and what will be done with the information and advice that they provide. Participants should also be told that feedback will be provided on the outcomes of the exercise. Being ‘upfront’ will help to build trust and credibility. Behaving secretively, on the other hand, will promote suspicion and mistrust and fuel rumours.

Discussions should be held in the individual’s or group’s native language, unless people indicate that they are proficient in, and comfortable about, speaking in another, more widely used, language.

Remember that effective consultation takes time, especially where communities rely on consensual decision-making processes. Conducting and facilitating consultations also requires considerable skill, so consider bringing in external specialists to assist. This will be especially important where the community is large and diverse, there are significant language and cultural differences, and/or there is a history of mistrust between the operation and the community.
Step Four: Synthesise and Integrate

The consultation process is likely to produce a mass of information and opinions. This raw data will need to be condensed and ordered so that the key themes can be quickly and easily communicated to workshop participants.

A suggested approach is to:

a) write a summary of ‘key points from the stakeholder consultations’ for inclusion in the workshop briefing papers;
b) include a column in the risk and opportunity assessment spreadsheet indicating, for each prompt, which stakeholders (if any) had raised this issue and summarising what they had to say; and
c) ensure that the person(s) with primary responsibility for conducting the consultations participates in the workshop.

The workshop

Inviting selected external stakeholders to participate in the workshop is a further way of ensuring that the community voice is heard, and will also add to the expertise available to the workshop.

External participants should be chosen primarily on the basis of their knowledge of the local community: for example, personnel from local or regional planning authorities, experienced researchers, and respected community representatives who can take a broad view. Care should be taken not to involve individuals who are closely aligned with particular interest groups or ‘causes’.

Because people from outside the industry may not be familiar with risk assessment techniques, they will need to have the process and their role in it carefully explained. It may also help to offer them a pre-workshop briefing and training session.

After the workshop

In the period following the workshop the key tasks will be to:

- provide the community with feedback on the outcomes of the workshop and keep people informed about what actions are being taken – or are planned – to address key issues
- ensure that planned controls have the support of, and are understood by, potentially affected groups in the community
- obtain ‘buy in’ from, and alignment with, service providers and potential partners in the community and the wider region.

The engagement and communication processes required to advance these objectives will be specific to each operation and will need to be incorporated into the operation’s ongoing planning processes. In broad terms, however, operations should take a proactive rather than reactive approach. This means that the focus should not just be on providing information and responding to concerns, but on seeking out the views of stakeholders and engaging them in regular dialogue about how the operation can contribute to better outcomes for the community.
RESOURCES


