Reduction of conflicts in the extractive industries using Good Neighbor Agreements

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by

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Conflicts between mining companies and communities are now prevalent in many countries of the world, both developed and developing. These conflicts have often resulted in delays of mine project development as well as adverse effects to the communities. Reduction of those conflicts has been shown to be best accomplished by good communication, transparency, and a willingness of each of the parties to both understand the positions of other participants, but also a willingness to compromise. One of the types of agreements that have shown success is termed a “Good Neighbor Agreement” (GNA). The needs for this project are to create an open dialog between the mining company and all interested parties who may have concerns regarding the social or environmental impacts from the mine, to minimize the possible conflicts and disagreements, and create the negotiation tools, which can be implemented any time, depending on the needs. In this case, an agreement is negotiated where good communication and frequent meetings are utilized, and the resulting agreement has sufficient penalties that if any of the signatories to the agreement fail to abide by that agreement, those penalties will be imposed. This process is often complicated, but ultimately has the potential to reduce threats of appeals or legal action, but at the same time may require elimination of certain practices. It also requires a commitment to see this process through to the reclamation phase and long term stabilization of the environment and the economies of the affected communities.
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Related Publications


Reduction of conflicts in the extractive industries using Good Neighbor Agreements

The simple fact is: in today’s world if we don’t bring people with us and if the majority of those living in the host communities don’t benefit from our presence we won’t be allowed to mine.”

Mark Cutifani, CEO Anglo American

Chapter 1. Introduction.

This research is a result of a project between Newmont Mining Corporation (Newmont) and the University of Nevada, Reno (UNR). Newmont has operated in the state of Nevada for more than 50 years and owns or controls more than 2.8 million acres of mineral lands. The company produces gold, silver, and copper, and has 11 surface mines, 8 underground mines, and 13 processing facilities. Most of the US Newmont mines are located in northern Nevada, employing 3500 people, with an annual gold production of approximately 1.5 million ounces.

Disagreements between mining companies, and residents, and non-governmental organizations (NGO’s) arise over environmental, economic and social issues. (Keenan et al., 2002). Attempts have been made to find methods for reducing those disagreements, primarily by improving communication and negotiation practices. While each country and specific mining site have different sets of issues, they are not confined to any social, political or economic circumstance. Although North American mines are generally regulated with more rigor than many developing countries, those conflicts are still prevalent and can result in wasted time and resources.
The mining industry is important to the state of Nevada, from the time when the Comstock boom was initiated in the 1860’s to present. With this history, the local population around the mines is generally supportive of mining. However, even in Nevada conflicts occur, and mining companies are looking for new opportunities to improve social and environmental practices and community acceptance of mine proposals (Smith & Tingley, 1998).

One method for improving environmental and social responsibility practices, introduced 25 years ago, is a Good Neighbor Agreement (GNA), a binding agreement between mining companies and communities and interested NGO’s. The purpose of the agreement is to establish a trust relationship between the industry and the various communities, to ensure that the benefits and risks from the mining operation are known, and communication procedures are in place to resolve conflicts that may arise.

There are only 14 instances of functioning GNA, with just a few developed for the mining industry. The reasons for the low number of agreements is primarily related to the difficulty in establishing the trust relationships between the industry and the affected community, the high cost, the long negotiation process, and ultimately fulfilling the requirements of a legally binding agreement. This latter factor is a particular concern for a mining company, but also problematic for public interest groups who are concerned that the most problematic issues can arise during the closure of a mine, when a GNA is no longer enforced.

The purpose of this research is to:

1. Determine how a GNA is relevant to Newmont mining operations in Nevada.
2. Examine the primary processes for development and implementation of GNA.
3. Establish the conditions where a GNA can be helpful and effective in North America.
4. Develop criteria and implementation guidelines that could/should be used to potentially establish a GNA in the state of Nevada for Newmont.
Background

Environmental and social challenges have arisen for the mining industry in both developed and developing countries, demonstrating the need to implement responsible mining practices that include improved community involvement (MMSD, 2002).

Developing countries and countries with transition economies experience both positive and negative impacts of the mining industry. During the last few years of the worldwide economic crisis, the mining industry, unlike most other industries, has still generally offered a broad spectrum of opportunities for local communities and contributed to development in mineral-rich regions. In particular, mines may be the only source of income in remote areas. Environmental and human rights issues may be minimized to protect jobs (MMSD, 2002).

Information regarding environmental problems in most developing countries and countries with transitional economies is limited. (Shah, 2004). Technical information on emissions is too often simply not available to the concerned public.

Key concerns in countries with moderately developed economies and major mining industries such as BRICS (Brazil, Russia, India, China, and South Africa) include the right to a clean environment, the right of access to information (the right to know), and the right of public participation in decisions on mine permitting.

However, even countries with moderately developed economies and major mining industries such as the BRICS, communities are requesting, even demanding recognition of basic environmental and social rights. These include the right for a clean environment, the right of access to information (the right to know), and the right of public participation in decisions on permitting of mines. But it is also the case that people who live nearest to the mines become dependent on the economic benefits from the mining activities. The conflicts between human rights and environmental protection are sometimes pitted against the need for jobs, and human rights and the environment often lose when the only source of income for the whole family is the respective resource extraction industry (MMSD, 2002).

Even in developed countries with active and important mining industries (e.g. Australia, the U.S., and Canada), the mining industry has related complications, including
interactions with aboriginal communities, information access, and legacy problems from historic as well as currently operating mines. In the United States, several mining operations are located on or near Native American reservations. The proximity often creates difficulties for both sides.

Conflicts between mining companies and other interests concerned about the environmental, social and economic impacts of mining can be long and costly. In many cases, these conflicts cannot be resolved due to the deep differences in opinions on whether a mine can be permitted. However, in other cases, many issues can be resolved when the parties are willing to communicate and seek mutually beneficial outcomes.

Binding agreements between mining companies and other interests are a potential avenue for reducing conflict in many cases. The concept of a GNA has existed for several years but has not commonly been applied to mining projects. At least in one case, at the Stillwater Mine in Montana, this type of agreement has been working well for over 10 years.

Hypotheses
This research examines the economic and social aspects of GNA as a mechanism for social acceptance of mining by local communities.

1. A GNA is economically viable for the mining company.
2. A GNA will increase the accountability of the mining industry and provide higher levels of confidence in the community that a mine is operated in a safe and sustainable manner.
3. A GNA can be useful when each organization realizes benefits from such an agreement and are willing to compromise on specific, site-selective characteristics of a particular community and mining site. The determination of those characteristics and education of the participants will require an understanding of what is possible under the current social, political and environmental conditions.
4. A template of a GNA can be broadly adaptable and guide participants towards finalization of an agreement.
Methods

This study utilized a combination of literature/regulatory resources, site visits, and primary sources of new information from people living in communities directly affected by mining.

Background information on conflicts was obtained using a database of practical tools for stakeholder engagement ("Labor Issues in Infrastructure Reform" Toolkit, Module 6: Engaging with Stakeholders) and an interactive environmental justice mapping platform (http://www.ejolt.org/2014/; accessed in December, 2014).

Legal and regulatory documents for mining sites were reviewed, including permitting documents from the Emigrant Mine (Nevada, USA). To understand international responsible mining concepts, data and reports from international organizations and international projects were reviewed. Significant sources include the International Council on Mining & Metals (ICMM) report “Breaking New Ground”, material on social responsibility from the Minerals Council of Australia and the Australian government, and stakeholder engagement principles from World Bank and International Finance Corporation (IFC) report “Large Mines and Local Communities: Forging Partnerships, Building Sustainability”. Annual reports of mining companies were reviewed for implementation of international mining standards and social responsibility practices, including material from Newmont, Barrick, Kinross, Rio Tinto, and Freeport-McMoRan.

The general issue of GNA’s developed in the non-mining sectors was reviewed, particularly where GNA’s have existed for the long term. Case studies were reviewed at mine sites in Alberta, Canada, the Stillwater Mine in Montana, and the Eagle Mine in Michigan. A site visit was also conducted to understand major issues and concerns of the Western Shoshone tribe regarding Nevada mining operations, including environmental, sociological, economic and cultural aspects and another visit was conducted with the Northern Plains Resource Council, an NGO, in Montana.

Primary source information in Nevada was collected through personal interviews, group meetings, a survey and evaluations with or provided to mining company staff from Barrick, Kinross, and Stillwater Mine and with or to Native Americans, direct neighbors,
local and regional community leaders, regulators, and people in the NGO community who have interests in mining. Roundtable interviews were conducted in October 2014 at the Initiative for Responsible Mining Assurance (IRMA), a global effort towards a “multi-stakeholder and independently verifiable responsible mining assurance system that improves social and environmental performance”. The survey covered issues such as communications and conflict management, environmental issues/health and safety, infrastructure needs, economic/social impacts from the mining industry, and community development. It also explored a possible framework for ongoing dialogue, such as a GNA.

**Broader impacts of research**

The resulting GNA principles and the step by step guidelines are intended to be used in the U.S. by people from the local communities who live nearest to mine operations and are most affected by the mining industry, by the Native American community who desire assurance that their lands are used in an environmentally sustainable manner, and by all in need of a productive dialogue with the mining industry. This guidelines, which could serve as a tool for independent assessment of mine environmental quality and as an educational resource, would provide instruction on how to develop the GNA. More importantly, it could serve as a mechanism for conflict resolution between the mines and the local communities not only to resolve current conflicts but also aid to establish non-legal based dialogue to help resolve potential future conflicts in the sustainable mining regulation process.

Implementing GNA’s will probably occur initially in developed countries where regulatory programs exist and are enforced. Neighbors and NGO are not regulatory agencies, and should not be put in a position of primary enforcement. The lack of strong regulatory agencies in developing countries can reduce the applicability of GNA since reliance on GNA for environmental protection is generally outside the bounds of what GNA can do.

The GNA is a potential beneficial method to provide the benefits both for mining operations and the local community and increase trust and communication strategies that
offer the potential to protect both mining and community interests, and can possibly reduce conflicts in resource development projects.

**Summary of results**

The implemented GNA’s that exist now have resulted in a reduction of conflicts, but are not often utilized. Completion of this research is expected to lower the barrier to obtaining agreement by providing efficient pathways for ultimately coming to a closure. The GNA can be utilized by communities in many locales and can be implemented whenever there is a need and willingness to create a working relationship between a mining company and a local community. The GNA should be used only in addition to the environmental protection documents and permits by the respective jurisdiction(s) and will represent a further assurance for both the community as well as the mining company. The GNA can be used in developing countries and countries with transitional economies and will play an educational role to show the points that may require special attention and be understandable by the community.
Stillwater Mining Company’s Good Neighbor Agreement.

1.1 Introduction to Conflict and the Mining Industry.

Environmental and social conflicts on mining projects are something of a recent development and have become increasingly prevalent over the past 50 years. (MMSD, 2002). In the early history of the western US, the primary reason for settlement was often related to mining. For example, the development of the Comstock area of northern Nevada was almost entirely dependent on the presence of gold and silver, and would not have been developed otherwise. The environment was never really considered, and mining jobs or services were the primary drivers of the economy of northern Nevada; the existing conflicts were focused primarily on wages and the availability of jobs.

However, as the population increased, and economies of western regions have diversified, mining has become relatively less important to most western economies. In addition, the scale of environmental and social impacts of mining development has demonstrated the risks of mining (ICMM, 2012). Environmental impacts from mining include land disturbance, pit lake formation, water and air pollution, and wildlife disturbance. Social concerns from communities who live near mining operations include public health, “legacy issues”, infrastructure and other development issues, distribution of wealth and the decision-making processes used to decide which priorities of the greater community will be implemented. Although uncommon in well-regulated countries, corruption and human rights issues are additional concerns in developing countries that are less well-regulated.

Environmental impacts

An example of an ongoing environmental issue is impacts to water quality, which have occurred for decades. According to the US Bureau of Reclamation (Rosa et al. 1996; Lyon, 1997; Ripley, 1996), in the year 1996, more than 12,000 miles of rivers and streams across the US had been contaminated from mining. An extreme case occurred at a series of mines at the Iron Mountain deposit, the largest copper mine area in California (U.S.), which operated from the 1890’s to 1963. In the tunnel workings, pH less than one has been recorded, while acid drainage and heavy metals caused massive fish kills as early as the 1930’s (Nordstrom and Alpers 1999). Other examples include the Phelps
Dodge Chino Copper mine in Santa Rita, New Mexico, which released more than 327,000 gallons of mine wastewater into Whitewater Creek during the 1980’s and negatively affected surrounding community and wildlife; a release of 10 million gallons of cyanide-laden water from the Brewer Gold Mine in Jefferson, South Carolina into the Lynches River in the 1990’s; and the Ray Mine in Arizona has polluted groundwater with copper and beryllium (Rosa et al., 1996).

The largest superfund site in the US is the copper mine complex in Butte, Montana and the associated smelter and waste ponds and dumps. In 1995, 340 migrating geese were killed when they landed on the Berkeley pit at the mine site, which was acidic with high concentrations of iron, aluminum, sulfate, copper, arsenic, and cadmium. (Davis et al., 1989). The impacts from this mine still exist and, as with Iron Mountain, several billion dollars will be spent on remediation.

**Regulatory responses**

These mining practices resulted in substantial concerns regarding the permitting of new mines, particularly on public lands. Federal and state agencies tightened mining regulations, including discharge limits into air, water and lands.

Major regulatory changes on federal lands included the 43 CFR 3809 regulations of the Burro of Land Management (BLM) and the 360 CFR 228 regulations of the US Forest Service (USFS); both require compliance with other national laws, including the Clean Water Act and the Clean Air Act, among others. Mining projects are also subject to parts of the Resource Conservation and Recovery Act (RCRA) as well as The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly referred to as the Superfund. Several mining sites are now listed sites under CERCLA, particularly the Butte site discussed previously.

State regulations have also been substantially tightened to reduce environmental impacts, and are still evolving. Nevada, for example, requires inspections, control of mercury emissions from ore processing plants, reclamation, and bonding for reclamation. States are limited, to some extent, in their control of mines on federal lands. The federal General Mining Law of 1872 still makes mining the highest priority on public lands and gives mining companies the “right” to develop projects on public lands. In many states in
the western U.S., as was the case historically, many local jurisdictions encourage mining due to the jobs and anticipated economic activity.

**Current conflicts**

The tension between mining proponents and those who remain concerned about the impacts of mining remains. Although the Mining Law of 1872 gives proponents certain rights, neighbors, Native American groups and NGO’s can use existing laws to delay mine permits, and even completely stop a mine from being developed (Environmental Law Institute, 1998).

An example of a current mine conflict in North America is the Pebble Mine on state land in Southwest Alaska. The Pebble Limited Partnership (PLP), originally a consortium of Northern Dynasty Minerals Limited (NDM) of Canada, Anglo American PLC based in London, Rio Tinto, and Mitsubishi in 2004, faced such stiff opposition that all the companies withdrew by 2014, with the exception of the junior exploration company NDM. The intense conflict between these mining companies and people from local communities, which escalated into national and international campaigns, was due to the high potential for acid and metal contamination to flow into two separate watersheds, putting at risk Iliamna Lake and major rivers (the Mulchatna, Nushagak, and Kvichak) that flow into Bristol Bay. The most productive wild salmon fishery remaining in the world. Lake Iliamna, the largest sockeye salmon nursery in North America, was initially considered for tailings disposal. As of 2015, exploration was on hold and NDM had not applied for any mining permits.

Another recent example is the Crown Butte Mines Inc., a subsidiary of Canadian Noranda Inc., at a gold mine in the Henderson Mountain region of Wyoming. The mine, at an elevation of 9,000 feet, is between Yellowstone National Park, to the south, and the Absoroka-Beartooth wilderness, to the north in Montana. It is at the headwaters of three streams 2.5 miles from the park: Fisher Creek, which drains into Clark’s Fork of the Yellowstone River, declared by Congress as one of the most endangered rivers in America; Daisy Creek which ends at the Stillwater River that flows through the park; and, finally, Miller Soda Butte Creek which flows directly into Yellowstone trout streams.
This mine was stopped through a national campaign by a variety of NGO’s and the land/mineral rights were purchased by the federal government.

**Good Neighbor Agreements**

The cases where mines have been blocked are more the exception than the rule. In most cases, permitting agencies approve mines and adopt mitigations to address concerns. Additionally, the public benefit of jobs, economic stimulation, and metals availability make mining development attractive, and mining is an appropriate use of public lands. In those large number of cases where a mine will be permitted, but concerns remain, Good Neighbor Agreements offer benefits to the mine and mine opponents: organizations concerned about mine development have a way to propose mitigations, and from the mining company’s perspective permitting uncertainty is reduced. In the few successful agreements that have established, both the mine proponents and critics have realized that open communication can resolve many of the complicated issues associated with mine development. (Lewis, 1996; Environmental Law Institute, 1998; Kenney et al., 2004; Zuzulock et. al., 2009).

While the notion of a GNA has existed for several years, it has not been studied in a systematic manner. Each mine and each community is different, and the issues that provide the basis for concerns will vary on a site-specific basis. GNA require a series of compromises on all sides, but ideally will provide a win-win for each of the communities. (Gross et al., 2005; Baxamusa, 2008; Parks et al., 2009).

**1.2 Stillwater Mine GNA**

On May 8, 2010, the Stillwater Mining Company (SMC) and the surrounding communities of Montana, U.S. celebrated the 10th Anniversary of the environmental Good Neighbor Agreement (GNA). This GNA is an excellent example of a responsible approach to environmental issues by the mining company as well as of active community involvement in the decisions making process. See map 1.1 SMC properties, Montana, USA.

This anniversary is an important date and not just for the Montana mining industry, but for all US mining companies that are interested in finding feasible solutions
to their own environmental and community issues. The experience of the SMC over the last decade provides good evidence that GNA’s are not only a theory, but can be put into practice. Their experience also shows how a GNA can be implemented, and exposes some mistakes that may occur during GNA development. The Stillwater Mine GNA continues to be a living document today.

Methods

For this project, the SMC GNA was analyzed in detail, including procedures, plans, and steps taken in its development. The people who created it and who have worked to improve it over the past decade were interviewed. The text is available for public review, along with numerous support documents.

The Stillwater mine site was visited in August 2013. The purpose of the trip was to meet with the local community, environmental NGO representatives, and staff from the Stillwater Mining Company to discuss the implementation of the agreement.

Meetings were held with Sarah Zuzulock, MS, PE (senior environmental
engineer, Kuipers & Associates), who has been the technical consultant for mine neighbors since the formation of the GNA and represents environmental NGO’s, with David Chambers, PhD, PG (Center for the Science in Public Participation) who is a technical consultant for environmental NGOs, with Bruce Gilbert (SMC Vice President) and with Randy Weimer (SMC corporate environmental manager).

Purpose and need for the GNA

The SMC signed the GNA in 2000 with three local Montana nonprofit corporations: the Cottonwood Resource Council (CRC), the Stillwater Protective Association (SPA), and the Northern Plains Resource Council (NPRC); the first two NGOs are affiliates of the latter (collectively the Councils).

The primary goal of this agreement was to solve the conflict between the mining company and the local community that arose due to potential surface water pollution from the mining operation. During the negotiation process, other concerns were brought to light, discussed, and addressed, and were reflected in the final GNA goals.

The SMC GNA is unique in that it was and is legally binding:
“It is the only legally binding agreement between citizen groups and a hard rock mining company in the world.” (http://www.cottonwoodresourcecouncil.org. Accessed August 2014)

The need for some form of agreement became apparent in 1992, when the Councils initiated litigation against the SMC’s East Boulder Mine and submitted a petition regarding water quality to the Montana Board of Health and Environmental Sciences. However, no action was taken. In 1997, the SMC submitted an application to renew a permit to discharge to surface water, and a Water Management Plan.

“After a supplemental Environmental Impact Statement (EIS) was prepared, the Montana Department of Environmental Quality (MDEQ) approved the Water Management Plan in 1999 and released the draft discharge permit.” (Zuzulock and Kuipers, 2009).

The Councils’ response was to request a public hearing, provide comments, and continue the litigation against SMC, and in 1998 filed an intent to appeal the State’s discharge permit renewal. However, the Custer National Forest (CNF) and the MDEQ approved the SMC permits. This long battle could have continued if the Councils and SMC did not start the negotiations.

Once the negotiations regarding the water quality issues began, other concerns related to the mine property were voiced, including traffic reduction, the mine’s footprint, clean-up of mine waste, community access to decision making, biological monitoring, fish monitoring, participation in monitoring events, waste rock facilities, reclamation, and closure plans. Finally, in May 2000, after twelve months of difficult negotiations, all parties signed the GNA.

**Parties to the GNA**

Creating the GNA required identifying the stakeholder groups that would participate, building trust, which was done by jointly creating committees, and by setting goals and measurable metrics. As was previously discussed, the four major parties involved in the GNA development and implementation are the Stillwater Mining
Company (SMC), the Cottonwood Resource Council (CRC), the Stillwater Protective Association (SPA), and the Northern Plains Resource Council; the last three known collectively as the Councils. The Stillwater Mining Company was discussed previously.

**The Northern Plains Resource Council (NPRC)** is a registered nonprofit corporation established in 1972 and located in Billings, Montana, with a goal to protect Montana’s natural resources including water and air, to promote waste minimization practices, and to protect quality of life for Montana citizens. The NPRC also solicits outside expertise for environmental monitoring, organizes community meetings, and provides and promotes public information. Most members of the Council are from the local community. One Council volunteer participates in the Responsible Mining Practices & Technology Committee (RMP&T). Managing the GNA is just one of many current activities of the NPRC.

**The Stillwater Protective Association (SPA)** is a local organization founded in 1975 and based in Stillwater County, Montana. It is an affiliate of the NPRC and also a registered nonprofit corporation in its own right. Its major role is to safeguard the quality of life in Stillwater County. The SPA keeps a close watch on the Stillwater Mine and ensures that it operates in an environmentally and socially responsible manner. Six volunteers from the SPA participate in the Oversight and Technology committees.

**The Cottonwood Resource Council (CRC)** is another affiliate of the NPRC and a registered nonprofit corporation established in 1988 by local citizens concerned about hard-rock mining impact on their homeland. It is located in Big Timber, Sweet Grass County, Montana U.S. The CRC is a very similar organization to the SPA above, as its primary concern is the quality of life in Sweet Grass County, which it strives to ensure by keeping a close watch on the East Boulder Mine operation. In fact, it was organized for that particular purpose and consequently was involved in all phases of the state and federal permitting for the East Boulder Mine.

**Independent technical consultants**, although not signatories on the GNA, helped build a working relationship between parties and lower the level of distrust as they developed technical reports and analysis. Science played a significant role in the negotiation process: decisions that helped to achieve compromises and to promote
innovation were all fundamentally scientifically sound.

The success of the SMC GNA is, to a large extent, based on the high level of activity and participation by people from the local community. An excellent example of the community involvement and an important step forward in the process of building a productive relationship was the decision by the Councils to stop legal action against the SMC and propose dialogue to negotiate problems and find compromises. The SMC in turn made a sizable concession by raising environmental quality standards higher than required by the state and federal regulations.

**Setting up the committees**

For the first five years, the primary concerns were the completion of the baseline data analysis and the development of the systematic plan for GNA implementation.

One of the major issues was the creation of Oversight Committees and the Technology Committee, which involved choosing the members, setting goals, and establishing responsibilities and effective communication between members. Two Oversight Committees, one for each mine, were set up. They consisted of two voting members from the local citizen group (CRC or SPA) and two voting members from the SMC. The Committees were set to meet every quarter.

The role of the Oversight Committees is “to review operations and ensure compliance with the Agreement” (NPRC, date) and to approve specific details for GNA implementation. It functions by organizing regular meetings for community participation and information exchange, and sets educational goals.

The Responsible Mining Practices & Technology Committee (RMP&T) was created with one voting member from each of the Northern Plains Resource Council citizen groups (CRC and SPA) and three voting members from the SMC. The RMP&T committee meets twice a year to discuss the new technology practices that lead to waste minimization and improve SMC’s environmental performance. Most importantly the RMP&T committee advises and makes recommendations for the Oversight Committees. In cases when the Committees’ meetings are not sufficient to solve a problem and achieve compromise, additional meetings could be arranged between the Councils and the SMC with independent expertise invited by both sides.
Creating these Committees was the first step in building trust between the SMC and the community. Bringing in independent expertise representing unbiased information facilitated the development of this trust between all parties.

**Goals of the GNA**

There were five goals established by the parties to the GNA (Zuzulock and Kuipers, 2013). The first was to minimize potentially adverse social, economic, and environmental effects the mine could have locally. As a necessary part of reaching that goal, a goal was set to establish and maintain open lines of communication between the parties to address issues of concern raised by Councils and residents affected by the SMC mining operations. To create trust, a goal was set to provide Councils with the opportunity to participate in the SMC decisions that had potential to impact the local communities, economies, or environment. In return for allowing Councils to participate in SMC decision-making, a goal was set to minimize future litigation, and instead to act through the processes and mechanisms of the GNA; that is, the GNA included a conflict resolution mechanism.

Perhaps most importantly, a goal was set that the GNA would be legally binding for the life of the mine, regardless of who owned the mine:

“to bind the SMC and the SMC’s successors, partners, subsidiaries, affiliates, and assignees to this Agreement for the life of mining operations” (Zuzulock and Kuipers, 2013).

**Cost of a GNA**

The direct cost of the Stillwater GNA is around $150,000 annually, and is the amount of funding that SMC provides to the NGO’s for the consultant costs and small amount of NRRC staff time. Other GNA’s, not located at mine sites, may be much higher. Cost information is not always available to the public. It will vary with a company’s size, size of the operation, potential environmental and social impacts, and other factors. The monitoring process may cost around $10,000 annually, the negotiation process $3,000 to $15,000, and meetings around $10,000. Implementation of agreements will depend on specific circumstances and negotiation, but can be substantial, particularly
when a mine plan changes. Thus, there will be annual costs, primarily for staffing and outside consultants, but may also involve implementation costs, which will be variable. In the case of the Stillwater GNA, the majority of these costs will be covered by the mining company, although substantial amounts of volunteer time from the participants were clearly evident.

The total cost of putting together an agreement may run $5 to $8 million, not including annual costs after the agreement is signed.

The first five years

The first five years were the most difficult and significant for the GNA. A great deal of work was done on both sides (Zuzulock and Kuipers, 2009). There was an early focus on baseline studies. An environmental audit at the Stillwater Mine was conducted utilizing a third party agreed on by the SMC and Councils. Baseline water quality reviews and biological monitoring were conducted for both mine sites, which became the basis of the Comprehensive Surface Water, Groundwater, and Aquatic Resources Protection Program, which is more stringent than state and federal requirements and included the tiered trigger requirements discussed previously. Baseline fisheries studies were conducted at the East Boulder River.

The focus expanded beyond baseline water quality. The Boulder River Watershed Association, a local NGO, was formed to focus on minimizing environmental impacts from agricultural activities. In addition, nearly 1,619 hectares (4,000 acres) of private land owned by SMC was donated for conservation easements. Traffic from mining vehicles had become a problem on local highways, so a traffic reduction plan was developed at both mine sites, and included mandatory employee buses and daily limits on private vehicle trips to the mine site.

There were also activities around mine processes, including waste and wastewater management. An independent review of East Boulder Mine’s reclamation plan and performance bond was conducted along with a pre-feasibility investigation of tailings disposal management technologies. The East Boulder and Stillwater Mine Water Optimization and Prioritization Management Plans were created. The management plans were an evaluation of pollutant load reductions and included a commitment from SMC
not to reduce treatment efficiencies.

**Water quality plan within the GNA**

Because the major community concern was on water quality, obligations around water quality were negotiated first. The federal Clean Water Act controls water pollution at points that discharge into waters of the US through the National Pollutant Discharge Elimination System (NPDES) program. In the state of Montana, the designated authority for implementation of the federal NPDES program is the state agency MDEQ, which issues wastewater discharge permits under the Montana Pollutant Discharge Elimination System (MPDES) program. Water pollution standards focus on organics, heavy metals, nutrients and other contaminants of concern (Circular DEQ-7 MDEQ 2006).

The major issue was to prepare a proactive water quality plan to minimize the environmental impact from the mining operation; this became, in the GNA, the Comprehensive Surface Water, Groundwater, and Aquatic Resources Protection Program. Technical consultants played a major role in the negotiation process. The SMC showed that they supported community involvement in the mining operation process and an increased degree of environmental responsibility by inviting three parties of independent consultants. They provided the biological monitoring, collected and analyzed samples, prepared an expert scientific opinion for the community, and completed the Baseline Water Quality Review Reports for both the East Boulder (CSP2 2002a) and the Stillwater (CSP2 2002b) Mines. Although the company ultimately pays the bill, the reimbursement system was set up in such a way that independent consultants were paid by the Councils who in turn submit annual budgets to the SMC.

Independent consultants developed the list of possible actions for water quality improvement.

“For each mine site the framework establishes points of measurement, parameters to be measured; as well as in-stream surface water trigger levels, direct discharge trigger levels and indirect discharge trigger levels. Each type of trigger level has three tiers or three numeric values, established for each parameter that set water quality standards with varying degrees of required responses and remedial actions should a trigger level be exceeded.” (Zuzulock
Trigger frameworks were developed as the protocol in the GNA. They required monitoring the downstream water condition for a suite of compounds\(^1\) as well as biological monitoring for microorganisms, microphytes, chlorophyll, periphyton, and fish, and reporting exceedances of standards if they occurred. Monitoring occurs both upstream and downstream of the mine.

Citizen’s involvement played a significant role in implementing the GNA, and included citizen sampling, the right to independent monitoring, and the right to conduct inspections.

The SMC is required to provide laboratory results to the Counsels within 24 hours of each monitoring; if the standards have been exceeded, these should be accompanied by a pollution response action plan. If the exceedance of standards occurs more than twice over the 15-month period, the SMC is required to address the issue at the next community meeting and to identify the potential sources of the pollutant. The possible sources are required to be monitored for the next 180 days with additional monitoring after 180 days, if needed.

According to the Zuzulock and Kuipers (2013) this program allowed:

‘‘\(\ldots\)for the Councils to participate in the development and oversight of SMC water management plans; to identify and address potential issues of concern related to water quality at the earliest possible time; to adopt a proactive precautionary approach for the water management plans at the East Boulder and Stillwater Mines; to maintain baseline water quality, biological integrity, and beneficial uses of the East Boulder and Stillwater Rivers and ground waters that may be impacted by SMC mining operations; to minimize and if economically feasible eliminate surface water mixing zones and direct discharge of effluent from the East Boulder and Stillwater MPDES permits; to reduce and if economically feasible eliminate the direct discharge and indirect discharge of pollutants from SMC mining operations to surface and ground waters; to make the East Boulder

\(^1\) Site-specific numeric standards were established for surface water concentrations of phosphorus, nitrogen, arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel, zinc, temperature and instantaneous discharge.
and Stillwater Mines zero discharge facilities if economically and technically feasible; and to identify new technologies and/or practices and modifications of present technologies and/or methods to meet the above objectives” (Zuzulock and Kuipers, 2013).

**Components of the GNA**

The original text of the GNA (effective May 8, 2000 with updates in 2005 and 2009) is 94 pages long, but key components are listed here. The GNA consists of four sections: Parties, Recitals, Signatures, and Appendices. The meat of the agreement requirements are in the Recitals and Appendices.

**Recitals**

This is the section of the document that goes into great detail about the agreements and obligations. They include:

- Objectives - with the major purpose to provide Councils the opportunity to participate in SMC decisions before final decisions are made;
- Definitions;
- Access to information and confidential information – describes the disclosure and limitation as well as the description of the confidential information;
- Funding obligations – establishes budgets, qualifying expenses, and the reimbursement process for technical consultants who perform environmental audits, evaluation of reclamation plans and bonding, tailing and waste rock management, and supplemental ground water studies;
- Third Party – establishes third parties selection, dispute processes, competency standards, disclosures, relationship, framework, and the right to participate; Third party responsibilities include review of all information relevant to the environmental concerns, fact-finding, and making recommendations in the form of final reports;
- Economic Feasibility – any decision regarding new technology or practices should be done after the preparation of an Economic Feasibility study, which considers direct and indirect costs and both company and community benefits;
- Committees
  - The Oversight Committees make decisions, make recommendations, and take action on issues arising under the agreement by majority vote;
  - The Responsible Mining Practices and Technology Committee review new technologies and practices, and eliminate or minimize the potential adverse impacts on the environment caused by SMC mining operation;
- Dispute resolution and enforcement – stipulates that the parties shall negotiate in good faith to resolve all disputes before attempting to resolve disputes through court enforcement or arbitration;
- Inspections – outlines the rights and obligations of parties in regards to inspections – given a 24 hour notice with a list of participants, time and goals, the Councils have the right to inspect SMC properties, collect samples, and take photographs;
- Conservation Easements – describes the easements which the SMC donated to the Montana Land Reliance;
- Mine-Sponsored Housing – confines mine-sponsored housing in Sweet Grass County and Stillwater County and prohibits mine sponsored accommodation in the area of easement;
- Additional SMC Covenants – describes other major concessions by the SMC, which include but are not limited to: the Traffic Reduction Plan, Audits, Reclamation Plan Revision and Performance Bond Evaluation, Tailing and Waste Rock Project, Disclosure, Water Program, Supplemental Monitoring Programs, Long-term Fisheries Study, Frameworks, Pipeline Mitigation Plan;
- Additional Covenants of Councils - the termination of pending litigation and the “best efforts” clause under which the Councils should use best efforts to resolve all issues through good faith negotiations in the relevant Oversight Committee before resorting to litigation
Appendices

Appendices provide detail and specifics on achieving the material in the Recital. Some of the Appendices are shown in Table 1.1

Table 1.1 List of appendixes from SMC Good Neighbor Agreement.

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Additional description</th>
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<tbody>
<tr>
<td>C</td>
<td>Designated Councils Staff and Consultants.</td>
<td>Roles and responsibilities of consultants</td>
</tr>
<tr>
<td>D</td>
<td>Arbitration</td>
<td>Describes the negotiation period, the arbitration panel, the selection of the neutral arbitrators, the times of hearings, the arbitration costs, and fees</td>
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<tr>
<td>E</td>
<td>Legal descriptions and locations of the SMC properties</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Commercial Traffic Reduction Plan</td>
<td>Rules, hours, limits, and monitoring program</td>
</tr>
<tr>
<td>I</td>
<td>Environmental Audit Program for the East Boulder and Stillwater Mines.</td>
<td>Describes frequency, limitations, criteria, participation, and implementation of environmental audits</td>
</tr>
<tr>
<td>J</td>
<td>Reclamation Plan and Performance Bond Evaluation</td>
<td>Describes the timeline, the objectives, and the terms of the evaluation of the Responsible Mining Practices and Technology Committee of the SMC Reclamation Plan, Performance Bond, and interim reclamation plan for the Stillwater and the East Boulder Mines</td>
</tr>
<tr>
<td>K</td>
<td>Tailings and Waste Rock Project</td>
<td>Describes the Project intended to minimize tailings and to research and use new evolving technologies designed to that effect. The Project shall have three phases: the Evaluation Phase, the Research, Development, and Piloting Phase, and the Implementation Phase</td>
</tr>
<tr>
<td>L</td>
<td>Comprehensive Surface Water, Ground Water, and Aquatic Resources Protection Program</td>
<td>Describes the right of the Councils to participate in the development and oversight of SMC Water Management Plans with the goal to maintain and support water quality, biological integrity, and use of surface and ground waters that may be impacted by SMC mines</td>
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</table>
Final Stillwater and East Boulder Water Quality Reviews

The reviews prepared by the Center for Science and Public Participation and completed and approved by Oversight Committees

Supplemental Monitoring Program

Describes the biological sampling program methodology, frequency, site locations, and water flow monitoring

Pipeline Mitigation and Prioritization Plan

Appendix L is particularly detailed, and consists of twelve (12) sections that are as follows:

Section 1 - Objectives; Section 2 – Definitions;

Section 3 – General Requirements – establishes the procedures, parties, general timeline, and schedule for collection and processing of samples, including QA/QC, limitations, reporting, reviewing of results, and supplemental monitoring programs;

Section 4 - Database. The Databases established for all collected data from SMC sampling and monitoring events. The users of database are SMC and East Boulder Miners and Councils;

Section 5 – Water quality review and report. The section describes the Councils access to the water quality data, database, and permits;

Section 6 – East Boulder and Stillwater mine supplemental monitoring programs for surface water, ground water, and biological resources. Section describes the minimum required monitoring parameters, components, timelines, and objectives for the water monitoring;

Section 7 - Supplemental Hydro – Geologic and ground water resources studies, with a goal to promote additional baseline studies for objectivity, define the geological hydrologic and ground water flow conditions;

Section 8 - Fisheries Study and Monitoring Plan. The section established the long-term fisheries monitoring plan, which should determinate fish destitution, analyzes of spices composition and population every five years;

Section 9 - Tiered Trigger Level framework for the east boulder and Stillwater Mines. The section established the frameworks for surface water, direct discharges and indirect discharges;
Section 10. Response and remedial actions. The section describes the actions for return levels of the parameter to Baseline Water Quality and to significantly reduce and eliminate the potential for future exceedances;

Section 11. Water management prioritization and optimization plan. The goals of the plan are to implement the objectives for water program and to apply the trigger framework. The sections also committed to improving mine performance by the new treatment technologies;

Section 12. Minimum required monitored parameters. The section was established the monitoring parameters for surface water.

Strengths and weaknesses of a GNA

Sarah M. Zuzulock and James R. Kuipers, who were the active participants in the GNA development, analyzed the Strengths and Weaknesses of the GNA in their article “The Good Neighbor Agreement – A Social Contract to Mine” (Zuzulock and Kuipers, 2013). The results are provided in Table 1.2.

Table 1.2. Strengths and Weaknesses of the GNA.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>Legally binding agreement that is binding to SMC and SMC successors, as well as the NGOs.</td>
<td>Hard to meet timelines for implementation defined in the 2000 GNA because of the amount of time required to refine program details and resolve disagreements between SMC and the Councils.</td>
</tr>
<tr>
<td>Resolution of potential disagreements and disputes through the mediation and arbitration framework outlined in the GNA.</td>
<td>Maintenance of community volunteer involvement and interest over time coupled with volunteer “burnout” for long-term participants is a challenge for the Councils.</td>
</tr>
<tr>
<td>Detailed language and provisions in the GNA are defining program requirements.</td>
<td>Requires SMC to invest more time at the onset of modifications to permits and programs.</td>
</tr>
<tr>
<td>Allows shared responsibility for the community and company to maintain the area's rural character and pristine water quality with active mining operations.</td>
<td>Results in potentially less oversight of mining operations from regulatory agencies.</td>
</tr>
<tr>
<td>Relationship developed between SMC and the Councils fosters trust, respect, integrity, and transparency.</td>
<td></td>
</tr>
<tr>
<td>Access to independent technical and scientific expertise for the community</td>
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</table>
Maintenance of water quality standards more stringent than regulatory requirements.

1.3 The Stillwater GNA today.

In 2012, the Stillwater GNA entered its 12th year of implementation. The first review and improvements were made after five years in 2005, and the second amendment was made in 2009. Amendments include the extending of some definitions and correction for land territory borders. The major GNA statements were not changed. See pictures 1.2, 1.3. Stillwater Mining Company 2014.

*Picture 1.2. Stillwater Mining Company 2014. Photo A. Masaitis*

*Picture 1.3. Stillwater Mining Company, Montana USA, 2014. Photo A. Masaitis*
The result has been an agreement that
“...exceed(s) federal and state requirements through numerous mechanisms including water quality protection, investigation of new mining technologies to minimize waste, incorporation of conflict resolution methods, traffic reduction measures, establishment of conservation easements, consultation with local Citizen groups, independent environmental audits, citizen access to information, and SMC funding for technical and scientific consultants” (Kenney at all, 2004 p.33).

1.4 Lessons learned in interviews.

Every agreement must be unique and based on local concerns; it is not reasonable to develop a general agreement that covers several mines. It can be useful to map out concerns to categorize and prioritize issues. There needs to be trust between parties, which is influenced and facilitated by individual personalities involved in negotiations, but there is likely to always be some distrust – this is why the Stillwater GNA allowed for environmental sampling by both mine workers and citizen samplers, as long as citizens were supervised by independent experts. It will be very difficult to establish trust without third party consultants, and a mining company could easily lose its credibility with the community, which will cause a GNA process to fall apart. The experts are a hinge holding community and company together; local experts and NGOs should be used, with the company paying them. Lack of trust is also why the GNA was written in a manner that allowed citizens to inspect and photograph – but some notice should be given to ensure there are no safety issues.

Before entering into a GNA, companies and communities should realize that it is a long and potentially expensive process, in part because of the cost of environmental sampling and paying consultants. For example, the budget for the Stillwater agreement was $150,000/year, with $30,000 for NPRC and $120,000 for consultants.

Budget issues are not the only concern for mining companies that may consider entering into a GNA. The ability and opportunity to identify local concerns is also important. People on both sides need to be willing to work together and recognize every side of the conflict: mining exists and will have impacts, the community will have
expectations, and there are tangible and intangible benefits in addition to negative impacts. The company needs to be willing to allow members of the public to be involved in mining company decisions. A “culture of conflict” cannot exist – every decision needs to be based on science, economics, logistics, and realities of the mining process.

For communities, the amount of time that individual volunteers will need to devote may be considerable, and some degree of burnout and turnover are likely. The first issues, which drove people to negotiations, will be the big obvious ones that everyone can see, but after time the energy around that issue is lessened, method for transferring information to new people ensures some continuity and institutional memory. Long term reliance on volunteer efforts is a particular concern for NGO’s.

The role of NGOs needs to change from primary opposition to helping people understand the issues, promote a culture of responsibility and participation, and contribute to selecting strategies and solutions.

The company needs to provide community meetings and ensure that everyone understands the subjects: mine economy, pollution concerns, technical support and innovations. Technical explanations of mining, monitoring, and other activities need to be provided, but in a manner that are understood by the audience. A closure plan should be part of the GNA, and this should include technologies and technical options that need to be understood. When a topic is on the agenda for a meeting, knowledgeable staff need to be on hand to answer questions and provide explanations. The staff and experts also have to realize that they can learn from the community – two way exchange of information is beneficial to all.

Companies need to consider whether the potential benefit is worth the time, staff, and financial commitments. An alternative to a GNA is to have sophisticated NGOs, such as the NPRC and its affiliates, opposing a mine proposal. As the Stillwater Mining Company realized, these organizations felt sufficiently strongly about the environmental impact of the mine, and it became clear that the NGO’s could delay permits, potentially at critical times and substantially increase the uncertainty of the operation of the mine.
A process needs to be in place to review the GNA, make changes, and to potentially disband the agreement. A voting process that includes online and by-mail voting should be established.

1.5 Summary.

The success of Stillwater’s agreement is based on the high level of motivation from all parties, the ability to make compromises during the negotiation and more importantly, on the trust doctrine. Implementation of the GNA has been an educational process for all parties. Development of the GNA showed how important it is to not stop negotiations, even if some difficulties and misunderstandings occur. The process of the GNA development helps to understand the full spectrum of the stakeholders’ interests. The GNA also teaches the community to be more active through enrollment in the decision-making process related to the mine operation.

Currently, the Stillwater community has a third generation of volunteers who brings a motivated effort to keep the GNA alive. Many volunteers are working between 20 and 60 hours per month, participating in the meetings and analyzing the different aspects of the agreement and mining operations.

Specific components contributed to the GNA success. Communication, compromise, and conflict resolution were paramount. Additionally it was important to keep the range of issues open; keep people, particularly volunteers, motivated; consider tribal interests; establish the roles and responsibilities of participants; and provide a 90-day review period for all important decisions. But ultimately, the personal interactions of the individuals involved indicated an impressive degree of trust between the long-term staff of the mining company and individual volunteers who participated in the agreement from its inception to the present.
Chapter 2. 
Environmental, social, and economic conflicts.

The purpose of this chapter is to examine major scenarios that can lead to conflicts between a mining company and the surrounding community, and determine possible geographic, economic and social characteristics of the host countries, which may affect the potential for conflicts.

The following three sets of issues for conflict development include environmental, social and economic.

2.1 Environmental Conflicts.

Environmental conflicts occur around water quality and quantity, air pollution, biological impacts, land usage (including visual impacts), and exposure to noise and vibration.

Water quantity

Water scarcity is recognized on a global geographic scale (Map 2.1), on a national scale in the US (Map 2.2) and can occur locally with climatic shifts. The amount of precipitation can have both positive and negative consequences on the environmental impacts of a mine. In arid regions, such as Nevada U.S., water is a limiting resource, and conflicts with other users (particularly agriculture) can be substantial. Conflicts on water use span a large range of scenarios, and are largely based on local concerns and competitive uses of water.

Many open pit mines need to dewater the pits during operations, which may lower water tables by several hundred meters, affect water tables regionally, and reduce water in springs or cause them to go dry (NDEP 2015). For example, one mine in Nevada has caused a drop in the water table along a 40 mile by 15-mile path (Myers, 2015). The long-term effect also depends on the connectivity of surface and ground water. Streams, lakes, and rivers can be affected by a lowered water table, and affect the well-being of local water users. Local biodiversity can decline through plant dryness and impacts on the local microclimate. When open pit operations close, evaporation from pit lakes will continue to keep the water table depressed, potentially in perpetuity (Myers, 2015).

In areas with an arid climate, mining companies typically use innovative methods to reduce water use, and often use zero discharge methods for water conservation and water quality protection. Water consumption for mining, milling and processing is reused until it largely evaporates from ponds, heaps or in dust control. They may also reduce conflict over water use by providing water to communities:

“For example, in 1996 only 3% of rural households in Cajamarca (Peru) had access to piped water resources, but by 2005, 85% of households had received new piped water connections, over half of which were installed by the mining company” (Babington and Bury, 2009).

Water quality

While low precipitation affects water quantity, the impacts on water quality are likely to be local in that there is less runoff, less water to manage, and less potential for off-site contamination. In areas of high precipitation, water quality is more likely to be the challenge (Moreland, 1993).

Water quality concerns include acidic drainage, neutral drainage, and release of contaminated water from the heap leach, waste rock, and tailings facilities. A high water table can provide a route for waste rock contaminants to leach into near-surface water and travel along surface and subsurface pathways; this may be very difficult or impossible to contain. High precipitation means more runoff from stockpiles and waste rock, and more water that needs to be treated and discharged, which raises the cost of mine operations. In some cases treatment will be required “in perpetuity”; this ongoing cost can only be supported through very high financial assurance monies. The issue of just how a mining company, which is a finite entity, and even a state regulatory agency, will operate a mine water treatment plant for thousands of years is difficult to contemplate and is one of the primary and recurring issues of mine opponents.

Water quality concerns can be categorized as those occurring during exploration, during mining (construction and operation) and those expected to occur after mine operations have closed. They can also generally be categorized as falling into acid drainage or neutral/alkaline drainage.
During exploration, the primary concern is the disposal of drilling muds and drill core tailings on the land surface. Drill muds contain salts that can kill vegetation, and drill core tailings may contain finely ground sulfide material, a source for acid drainage.

During construction, sediment runoff is the primary concern. This is generally mitigated with ditches, ponds, and barriers.

During operations, water is routed and controlled to prevent off-site contamination. Contamination issues unique to operations include spills of process chemicals (cyanide used in gold ore extraction, sodium hydroxide) and fuel. When contamination does occur, it is usually discovered by mine operators, reported and managed.

The adverse effect depends on the type and concentration of process chemicals, and is mitigated by appropriate facility construction and water balance calculations. This is why communities may focus on water balance models and the geophysical robustness of mine facilities. Mine operators may also mitigate by applying international recommendations, such as those of the International Cyanide Management Code which tracks cyanide from cradle to grave.

Acid mine drainage (also called acid rock drainage) forms following chemical reactions of water and sulfide-bearing minerals (such as pyrite, chalcopyrite, and galena), resulting in release of sulfuric acid which dissolves elements in surrounding rock material. Copper, cadmium, and zinc are common toxic metals released in acid drainage. The resulting water is often very toxic, and may dramatically affect aquatic life. Neutral and alkaline drainage refers to the leaching of metals and metalloids that are soluble at neutral and alkaline pH, such as oxyanions of arsenic, selenium and antimony, and is more likely to occur with carbonate rock material. These can also be toxic to aquatic life at low concentrations (Jambor et al., 2003).

Acid and neutral drainage can occur throughout the life of a mine and may go on in perpetuity. Solid covers (liners and earthen) and water covers are used to mitigate the seepage by slowing chemical reactions and preventing contact with water that can leach soluble elements. There is understandable concern about developing mines where waste material needs to be protected forever, and where acid or neutral drainage needs to be run
through a water treatment plant in perpetuity in order to discharge non-toxic water to streams.

**Air pollution**

Airborne emissions occur during every stage of the mining cycle, including exploration, development, construction, and operational activities.

“All activities during ore extraction, processing, handling, and transport depend on equipment, generators, processes, and materials that generate hazardous air pollutants such as particulate matter, heavy metals (mercury), carbon monoxide, carbon dioxide, sulfur dioxide, nitrogen oxides and VOCs.” (Guidebook for Evaluating Mining Project EIAs [https://www.elaw.org/files/mining-eia-guidebook/Chapter1.pdf](https://www.elaw.org/files/mining-eia-guidebook/Chapter1.pdf) Date of access January 23, 2015).

Ore processing also produces emissions.

“…gold and silver is produced in melting/fluxing furnaces that may produce elevated levels of airborne mercury, arsenic, sulfur dioxide, and other metals” (Guidebook for Evaluating Mining Project EIAs [https://www.elaw.org/files/mining-eia-guidebook/Chapter1.pdf](https://www.elaw.org/files/mining-eia-guidebook/Chapter1.pdf) Date of access January 23, 2015).

Mercury (Hg) can be released in substantial quantities during ore processing, most commonly during thermal processes in ore roasters or heat and pressure in autoclaves. For example, in 2008 a single gold mine in Nevada released over 1,800 lbs of mercury into the atmosphere (EPA, TRI 2008). The State of Nevada has developed a regulatory program to reduce mercury emissions from thermal sources, which is showing substantial success. In 2010, federal regulations were imposed that limit mercury emissions from roasters and autoclaves at new facilities to 84 lbs per million tons of ore processed. Mercury is also released from precious metal heaps and tailings facilities through volatilization of mercury from process fluids (Gustin, 2010). Mercury that is released can enter waterways may accumulate in the food chain as methyl mercury, and poses neurological risks particularly to children.
After the ore is processed, it goes to a smelter. Pollutants from smelting may include sulfur dioxide (SO₂), hydrogen fluoride (HF), nitrogen oxides (NOₓ), and heavy metals such as lead (Pb), arsenic (As), chromium (Cr), cadmium (Cd), nickel (Ni), copper (Cu), and zinc (Zn) depending on the type of ore.

Toxic impacts can occur from particulates and gases. Dust (PM₁₀) released during excavation, blasting, tailings beaches, waste dumps and roads is an irritant, while extremely small particulate matter (PM₂.₅) released during diesel combustion can penetrate deeply into lung regions. The CO₂ released by trucks and power generation is not toxic, but contributes to climate change; additionally, vegetation that consumes CO₂ may be cleared to build the mine.

Environmental Protection Agency (EPA) recognizes six principal hazardous pollutants: particulate matter (PM), carbon monoxide (CO), lead, nitrogen dioxide (NO₂), ozone (O₃), and sulfur dioxide (SO₂). These hazardous pollutants are regulated through an air quality permit, whether they come from mobile sources such as heavy vehicles (Picture 2.1) or stationary sources such as power generation plants, both of which are sources of PM, CO, and volatile organic carbons (VOCs).

PM, Pb, and stack emissions may be regulated by the amount of pollutant per volume of air, and if the facility is considered a “major source” in their air quality permit, they are limited to emitting less than 10 tons annually of a single hazardous air pollutant or less than 25 tons annually of a combination.

Fugitive emissions are also a concern, and generally not regulated (except PM₁₀). These are emissions that are not captured, and include emissions from leach pads (e.g. mercury and hydrogen cyanide), tailings, and waste rock. CO₂ is also unregulated.

Mitigation efforts are applied for point sources (air pollution controls and scrubbers at power emission points to remove Hg, SO₂ and NOₓ) and non-point sources (spraying down roads to reduce dust, applying surfactants to tailings beaches), and PM₂.₅ can be reduced through low sulfur diesel fuel, computerized fleet management, and maintenance (Norgate and Rankin, 2000).

Laws in the U.S. that control air pollution from the mining industry include: the Clean Air Act, that requires permits and control for mineral processing operation, and the
National Emission Standards for Hazardous Air that regulates different area sources which emit less than 10 tons annually of a single hazard air pollutant or less than 25 tons annually of a combination of hazardous air pollutants.


Land use and landscape change.

Mining can prevent mine neighbors from accessing land they have traditionally used, for instance for fishing or hunting, or can remove land that could be used for farming and ranching. In Nevada, one of the concerns for ranchers is the reduction of available land for grazing.

Visual characteristics are also important, as people are often not ready for the dramatic change in landscape (Picture 2.2). It is important to inform people about the future land usage and landscape change before construction, and to present the post-mining land use plan for public input.
Other options for reducing the visual impact include minimizing the overall footprint of the mining area, minimizing the amount of waste produced and stored, maintaining biodiversity by transplanting or culturing endangered plants, enforcing a plan to prevent invasive plants from encroaching, and using native plants in reclamation.


**Noise, vibration.** Noise and vibrations can be a problem for both mine employees and neighbors to the mine. Sources include blasting, large trucks, power generators, ore-crushing mills, loaders, and depending on the type of mine, electrical locomotives and long-wall shearers (Darling, 2011). Noise can increase blood pressure, nervousness, sleeplessness, and fatigue. Noise-induced hearing loss

“*is the most common occupational illness in the United States, with 30 million workers exposed to excessive noise levels every day*” (McBride, 2004).

Low-frequency noise affects nearby residents because it travels a greater distance and can be amplified by buildings and homes.
“Low-frequency noise may cause notable human disturbances even when the decibel level (the sound pressure level) is below 30 dBA” (Moller and Lydolf, 2002).

The Mine Safety and Health Administration (MSHA), which has established an 8-hour exposure limit of 90 decibels (dB), regulate noise and vibrations and at no time must noise levels exceed 115 dB. Regulations also cover low-frequency noise.

Impacts are mitigated through limiting exposure time, protective equipment, and special construction to reduce noise and vibrations.

2.2 Social Conflicts.

The social benefits from mining may include scholarships to support education, support and involvement in the cultural life of the community, and building parks, clinics, and other community-based structures.

Social conflicts occur when there is lack of transparency or understanding regarding social benefits and company plans, potential for serious environmental or cultural harm, or disturbance of spiritual traditions, especially in an area with indigenous people communities. Communities may have a different expectation of their role in the decision-making process than the mining company does.

“If community concerns are incorporated into mining projects (e.g., to prevent, control, and reduce environmental impacts) and if local communities see that they are receiving a fair share of benefits (e.g., through employment opportunities, construction of public infrastructure, CSR programs, etc.), then local communities are more likely to welcome mining projects”. (The Fraser Institute - MiningFacts.org).

Social concerns expressed by communities

Communities may also have concerns about negative impacts such as an increase in the gap between rich and poor, wage inequality between those who work at the mine and those who do not, or an increase in drug, prostitution and crime.

Health is also a concern. In Montana, in the Clark Fork basin near Butte, national
cancer statistics showed elevated death rates from cancer (lung, bronchial, trachea) with strong links related to mining and smelting, which had occurred for over a hundred years in the region (Michael et al., 1995; Lang et al., 1991).

All disturbance of quality of life will be an issue, particularly if the mining company is not familiar with community needs and concerns related to transportation.

**Social concerns expressed by indigenous communities**

Social impacts have been evident among Native American people, who have commonly been the recipient of the impacts of mining but have not benefited (Silva, 2012). For example, in the 1990’s community public health impacts were linked to Zortman Mining Inc. (owned by the now bankrupt Pegasus Mining company) which had operations near Montana’s Little Rocky Mountains. The Gros Ventree Indian Tribe discovered cyanide contamination in the water. This resulted in extensive efforts by the US Bureau of Land Management (BLM) and state regulatory agencies to remediate water.

Working with indigenous peoples is a separate consideration that requires special communication methods for creating productive dialogue. Historically there is a lack of trust in mining companies, given a legacy of abandoned, un-remediated mines. In addition, there needs to be an understanding of the way in which decisions are made in indigenous communities, the appropriate partner(s) for engagement, and a willingness to work within indigenous decision-making structures. The concept of land itself is different for indigenous communities, for whom the land is

“...a physical representation of their culture, their spirituality, and their identity. The land often represents the source of food, medicine, clothing and shelter and provides the base for self-government and economies.” (ICMM, 2014)

These have led to the development of two general principles:

“Principle #1 - Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities and Principle#2 - Contribute to the social, economic and institutional development of the communities in which we operate” (ICMM, 2014).
2.3 Economic conflicts.

Mining has the potential to shape and affect economies directly and indirectly. “Mining brings employment, government revenues, and opportunities for economic growth and diversification. However, market fluctuations, economic and public institutions, and resource revenues can present challenges in converting natural resource wealth into sustainable economic growth and development” (MiningFacts.org).

There is no doubt that mines can bring money into local and state coffers. Gold mining companies that are members of the World Gold Council spent $7.5 billion in the US with $750 million going to government, $6.3 billion in Australia with $363 million going to government, and $3.7 billion in Argentina with $482 million going to government (Jamasmie, 2014). They also infused $37.4 billion into local suppliers of goods and services worldwide, and provided at least 160,000 jobs globally in 2013 (Heymann, 2014) (Figure 1).

However, they are not generally a large contributor to a nation’s economy or jobs, frequently making up less than 2% of a nation’s employment and less than 10% of gross domestic product (Figure 2.1).

Herein lies one of the reasons for economic conflict—the actual availability of jobs, and matching the skill set of the local community with the skills needed by mining companies. Additionally, there may be concerns about whether jobs in other areas, such as tourism, may be lost when the viewshed is lost and there is more noise and traffic.
Figure 2.1. “Responsible gold mining and value distribution, 2013 data” from the World Council Gold Report, October 2014. The figure shows that of the amount spent by gold mining companies, virtually all goes to goods and services supplied to the company, with only 12% going to government in taxes, royalties, and leases and 17% going to people and communities.

The greatest issue for the economic scenario is a misunderstanding of the mining economy by local communities. Factors such as the degree of automation and technological skills required, dependence on the price of ore, and understanding of a company’s profit margins are vital to the number of jobs, types of jobs, and length of time jobs will be available and the mine itself will contribute to secondary economies such as hotels, restaurants, and hardware stores. Lectures, workshops, and transparency during negotiations and permitting can inform communities new to mining economies.

2.4 Summary of steps to prevent conflicts.

Mining companies should be involved in the sustainable development of the region not just during the mine operation time, but also post-mining.

In order to prevent conflicts based on environmental concerns, mining companies can employ technologies that maximize water recycling and provide water to communities in areas of water scarcity. To reduce contamination of water, they may implement a water quality monitoring program with open access to data, provide water treatment of mine effluent, control runoff, and participate in international programs and certifications.
Design of heap leach pads and tailings facilities can reduce seepage of contaminated water. Air quality can be mitigated by controlling pollutants from smelting and ore processing plants, reducing dust, and monitoring air quality. Land use conflicts can be reduced by minimizing the mine footprint, using local infrastructure, and supporting biodiversity in reclamation. Overall, environmental protection strategies depend on the type of operation, mine location, companies’ financial availability, and local policy.

Social conflicts can be reduced through transparency and meaningful engagement. “Government regulations and policies that reduce conflicts include granting land rights to local communities (mainly indigenous people), establishing fair negotiating mechanisms for land acquisition, and providing social services in resettled areas (e.g. education, health, and transportation services). (MiningFacts.org).
According to Carstens and Hilson (2009), in order to reduce social conflict, communities need to be engaged in negotiating issues, an external grievance mechanism needs to be designed, and poverty-reduction programs need to be discussed to mitigate the impact of a mine’s intrusion in a community.

Economic conflicts can be reduced through information to ensure the mining economy is well-understood, and by understanding the local economy and needs of residents.

“…creating new job opportunities for those who have been displaced, ensuring real agricultural productivity in resettled areas, guaranteeing provision of social services and access to common resources (e.g., fishery areas), compensating those people who did not have property rights but have occupied and/or made improvements to the land, and buying land at about same price from all community members and paying fair prices (“replacement value” instead of ”market value”). (MiningFacts.org).

There is no guarantee that applying good practices will avoid conflict. A mine brings real impacts to the environment and existing socio-economic systems, and informed communities may still oppose mining operations.
Global environmental change affects the human habitat. This effect is enhanced by mining operations and creates new challenges in the relationship between mining companies and the local community. These new economic, environmental and social challenges for the mining industry indicate the importance for improved community involvement and improved communication. Conflicts in the development of mining projects are now common between the mining proponents, NGO’s and communities. These conflicts can sometimes be alleviated by early development of better modes of communication, and a formal discussion format that allows airing of concerns and potential resolution of problems.

The purpose of this chapter is to develop and analyze a Stakeholders Engagement Plan as a first step for development of a Good Neighbor Agreement (GNA). The goals of this project are to create an open dialog between a mining company (e.g. Newmont Mining Corporation) and interested parties who may be affected by a mine (e.g. the Emigrant Mine), to minimize the possible conflicts and disagreements, and create negotiation tools, which can be implemented when the need should arise.

3.1 Newmont Mining Corporation: Introduction of the Company.

Newmont Mining Corporation (Newmont) was founded in 1921 in the USA as a “holding company for private acquisitions in oil and gas, mining and minerals enterprises” (According to the official Newmont web page). Currently Newmont is one of the world leaders in gold production, and has operations on five continents, including the nations of Australia, Peru, the Unit, Indonesia, Ghana, New Zealand and Mexico.


Social Issues and Concerns Related to the Newmont’s Operations.

Although Newmont has a highly developed corporative strategy regarding community relationships, conflicts with local communities and NGO’s have occurred near Newmont operations.

One of the larger conflicts, related to a Newmont operation, took place in Peru in the gold-rich Cajamarca region, where the local community protested against Newmont’s gold-copper Conga project. Newmont is owner of a 51.35% stake in two gold–copper projects², the Yanacocha gold mine, and the Conga project that is located 75 kilometers

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² Joint venture for the Conga project: Compania de Minas Buenaventura owns 43.65% while the International Finance Corporation owns the remaining 5%. (According to Mining. com, the news source for mining industry. Available at: http://www.mining.com/peru-abandons-newmonts-4-8-billion-conga-project-66180/)
northeast of the city of Cajamarca. The most serious conflicts occurred in 2011, when more than two thousand protestors from 32 communities participated in the actions. The primary reason for the protest action was water contamination from mining the Yanacocha Mine, which raised suspicion in the community that a similar water quality problem would result from the Conga project, even though Newmont had produced an EIA for the Conga project, which indicated that little or no water contamination would occur, and the EIA was approval by the central Peruvian government in 2010. Following the violent protests, Newmont suspended further development of the Conga project.

In 2013, Newmont published the official investigations report “Listening to the city of Cajamarca” (Kemp et al., 2013) provided by The Centre for Social Responsibility in Mining (CSRM) and the CCPM Group Consul. The report noted that one of the reasons for the conflict is a disagreement between the national and local government. The investigation includes a survey of participants from all 32 communities involved in the protests regarding local issues and concerns related to the Conga operation. The report also provides the findings and steps, which should be implementing in this area. (See table 3.1)

<table>
<thead>
<tr>
<th>Findings</th>
<th>Remediation Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From the standpoint of the people interviewed, the company’s entry, presence and interaction with the people of Cajamarca city has contributed economic inequalities and a profound negative emotional legacy.</td>
<td>1. Initiate an organizational change process.</td>
</tr>
<tr>
<td>2. Most people interviewed perceived that Newmont Yanacocha suffers from an inability to listen effectively to the community.</td>
<td>2. Provide an apology.</td>
</tr>
<tr>
<td>3. There are clear links between the “Conga Crisis” and Yanacocha’s legacy, which have not been defined or achieved community acceptance</td>
<td>4. Prioritize local-level relationships.</td>
</tr>
<tr>
<td>6. Development and social exclusion are significant factors in the conflict. However, it is evident from the interviews that the company has not been able to articulate a coherent development agenda, either internally or externally.</td>
<td>5. Support community.</td>
</tr>
</tbody>
</table>

Table 3.1. Findings and steps from investigation “Listening to the city of Cajamarca” (Kemp et al., 2013).

Due to these unresolved conflicts, and intense community opposition to the Conga Mine, Newmont warned that it would suspend operations at the site, and ultimately has done so.

“The mine, capable of producing up to 350,000 ounces of gold and 120 million pounds of copper per annum with a 19-year life of mine, was supposed to begin production in early 2015. But after years of disruptions, Newmont warned last April that it was willing to reallocate capital to projects in other countries such as Australia, Ghana, Indonesia and the US” (Jamasmie, 2014).

Another conflict developed in Indonesia on the Newmont copper project Batu Hijau, which is located on Sumbawa Island. Environmental activists protested against mine waste disposal in Buyat Bay and have accused Newmont, as well as other mining companies, of skirting laws when exploiting Indonesia's natural resources. However, following an extended legal hearing, a panel of judges disagreed with the environmental organizations.

“As a result, after the three-year jail term a panel of judges found there was no evidence to support criminal charges that the company had polluted Buyat Bay” (Greenlees. April 25, 2007. The New – York Times).

Newmont did reach a $30 million goodwill agreement with the government that provides for ten years of environmental monitoring and community development aid.

These examples show that open dialog between the mining company and community should be a priority, even at the initials stages of mine. Sometimes, the small contribution in the creation of trust between community and company has the same importance as a government permits and approvals.

3.2 Description of the Emigrant Mine Nevada, USA.

The Emigrant Mine open pit gold mine is located approximately 10 miles south of Carlin, Nevada (see Map 3.1). The first Plan of Operations for development was
submitted in January of 2004 and resubmitted in March of 2007. The first draft of the Environmental Impact Statement (EIS) was released on March 25, 2005, and the second version on November 19, 2008. The BLM and Nevada Division of Environmental Protection (NDEP) developed an adaptive management plan for the Emigrant Mine, which is based on the DEIS (public comments and agencies reviews). The Final EIS (FEIS) for the Emigrant Mine was submitted for the agency review (Bureau of Land Management, NV) in December 2010. See pictures 3.1, 3.2.


![Picture 3.1. Emigrant Mine waste rock. Newmont Mining Corporation, NV, USA. Photo A. Masaitis](image)

This project was initially controversial following submission of the Plan of Operations, primarily due to concerns about the potential for acid generation at the site
and the re-routing of an ephemeral stream. This deposit lies very near (1-2 km) a now-closed acid generating waste rock dump at the Rain Mine. Drainage from this waste rock dump is highly acidic, and will continue for the foreseeable future. The U.S. EPA commented extensively on the Emigrant project, as did the NGO community, and the U.S. Bureau of Land Management, required extensive additional data on the mine. Ultimately the mine was permitted, and from the data developed since the first plan of operations was submitted, the likelihood of acid generation is considered to be small. During those initial discussions, Newmont and NGO began discussions on whether this mine could serve as an example for development of a generic GNA, and those discussions were initiated with the goal of developing a GNA for the Emigrant Mine. However, when it became apparent that the environmental risks were relatively minor, the effort to prepare a full GNA for this mine did not appear necessary or useful. The drivers for creation of a GNA, including substantial public concern, clear threats to the environment, and other social/economic issues were simply not present, compared to concerns that were present for the Stillwater Mine. The mine is simply a midsized heap leach mine in Northern Nevada, of which there are several in Nevada. Instead, the Emigrant Mine is being used as a surrogate for a mine that could be used for development of a Stakeholder Engagement plan and the environmental review of a proposed mine.

The communities being considered include Elko community, Battle Mountain Community, Eureka county community, and Western Shoshone tribal communities.

*Pictures 3.2. Emigrant Mine heap leach development. Newmont Mining Corporation, NV, USA. Photo A. Masaitis.*
Environmental Review.

The Lead agencies for the Environmental Impact Statement are the U.S. Department of the Interior; Bureau of Land Management Elko District Office Elko, Nevada. Cooperating agencies include the Nevada Department of Wildlife and the Nevada Division of Environmental Protection. According to the Final EIS, the project includes an open pit mine, a waste rock disposal facility, an oxide heap leach facility, construction of haul roads and ancillary facilities. The life time for the Emigrant Mine is 14 years with a 30 years post–closure period (see Table 3.2). The amount of waste rock excavated is projected to be 83 million tons (Mt) and 92Mt of ore that will be subjected to heap leaching with cyanide solution for gold recovery. The reclamation activities include removing structures after cessation of operations, regarding disturbed areas (including roads), drainage control, removing and regarding stockpile areas, replacing salvaged growth media, revegetation, and reclamation and diversion control monitoring” (Final EIS Emigrant Mine. Newmont Mining Company. December 17, 2010. BLM/NV/EK/ES/11-05+1793)

Table 3.2. Proposed Emigrant Mine Schedule. Copied from Final EIS. 2010.

According to the Final EIS of the Emigrant Mine, the project will have the following impacts on the environment:

“The Emigrant deposit is a large, shallow, low-grade, oxide ore body exposed along the side of a hill. The deposit extends from the bottom to the top of the hill,
which would facilitate mining in phases up the hillside allowing waste rock to be placed in previously mined out portions of the pit. The open pit is approximately 615 acres” (Final EIS Emigrant Mine, 2010).

Dewatering is not proposed in the EIS because the pit does not extend below the groundwater table level.

“Development of the Emigrant Project would disturb approximately 1,418 acres, of which 1,170 acres are public land (including 442 acres of public surface and private mineral estate) and 248 acres of private land.” (Final EIS Emigrant Rain Project).

Disturbances of the land see in Table 3.3.

Watershed characteristics: Dixie Creek flows north to the South Fork Humboldt River, which then flows into the Humboldt River approximately 10 miles northeast of the Emigrant Mine area. This watershed is bounded on the west and south by the Piñon Range and the east by White Flats and Cedar Ridge. Drainages in this watershed are either perennial (year-round flow), intermittent (flow is seasonal in response to precipitation and groundwater discharge) or ephemeral (short-term flow only in response to snowmelt and significant rain events).

Table 3.3. Disturbance Categories and Amounts.

```
<table>
<thead>
<tr>
<th>Disturbance Category</th>
<th>Disturbance Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>20 exploration holes (0 acres)</td>
</tr>
<tr>
<td>Exploration Roads and Pads</td>
<td>50 acres</td>
</tr>
<tr>
<td>Roads</td>
<td>175 acres</td>
</tr>
<tr>
<td>Drill Hole Abandonment</td>
<td>5 monitoring wells (0 acres)</td>
</tr>
<tr>
<td>Pits</td>
<td>606 acres</td>
</tr>
<tr>
<td>Process Ponds</td>
<td>17 acres</td>
</tr>
<tr>
<td>Leach Pads</td>
<td>115 acres (Phase 1) + 162 acres (Phase 2) = 288 acres</td>
</tr>
<tr>
<td>WRDF</td>
<td>78 acres</td>
</tr>
<tr>
<td>Foundations and Buildings</td>
<td>4 acres</td>
</tr>
<tr>
<td>Yards</td>
<td>226 acres</td>
</tr>
<tr>
<td>Drainage</td>
<td>24 acres</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,468 acres</strong></td>
</tr>
</tbody>
</table>
```
Air quality: Mining activities such as mining, loading, hauling, and placing the ore on the heap leach facility, and disposal of waste rock are the contributions for the particle and gasses air pollutants. The five criteria of air pollutions determined for the Emigrant Mine are: PM10, PM2.5, CO, NOX and SO2 with concentrations which are not expected to exceed National or Nevada ambient air quality standards.

Water quality: Water for mine operations would be supplied from existing Dixie Creek Valley wells at rates similar to amounts pumped for Rain Mine operations (130-140 million gals/yr). Pumping for about 14 additional years is not expected to affect the flow in Dixie Creek. Diversion and replacement of a natural intermittent stream with an engineered stream channel through the operational and reclaimed mine pit area is proposed. Some increased erosion and sedimentation with potential release of trace elements to ground water and surface water are potential impacts.

Wastes, Hazardous or Solid: PAG waste rock placed in cells and encapsulated. The ratio of acid neutralizing potential to acid generating potential (ANP: AGP) is at least 3:1, which indicates a low probability of acid generation.

| Terrestrial Wildlife | Loss of approximately 1,400 acres of wildlife habitat would eliminate cover (nesting, hiding, and thermal), breeding sites, forage, and subsequent displacement or loss of wildlife. Species dependent on plant communities with a significant component of sagebrush and trees would experience a net loss in... |
Table 3.4. Direct and indirect impact on other natural resources. EIS, 2010.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and Cultural aspects of the Emigrant Mine.</td>
<td></td>
</tr>
<tr>
<td>Fisheries and Aquatic Resources</td>
<td>Approximately 0.15 acre of aquatic habitat would be removed by the proposed mine pit, which would eliminate a small population of Lahontan speckled dace, Lahontan resident shiner and aquatic macroinvertebrates.</td>
</tr>
<tr>
<td>Wetland and Riparian Areas</td>
<td>Loss of 0.15 acre of wetland and 0.376 acre of non-wetland waters of U.S.</td>
</tr>
<tr>
<td>Upland Vegetation</td>
<td>Disturbance to 11 vegetation community types over approximately 1,400 acres. The direct impact includes the soil damage due to the soil and wind erosion, loss of soil during salvage, replacement, and construction activities.</td>
</tr>
<tr>
<td></td>
<td>Disturbed areas would be susceptible to invasion by undesirable, non-native species (weeds).</td>
</tr>
<tr>
<td></td>
<td>Removal of vegetation during site construction and operation would result in soil movement from the site.</td>
</tr>
<tr>
<td></td>
<td>Potential off-site impacts to vegetation from use of enhanced evaporation system during heap leach decommissioning.</td>
</tr>
</tbody>
</table>

**Social and Cultural aspects of the Emigrant Mine.**

According to the Final EIS (2010) for the *Paleontological resources* in the Emigrant Mine are not exceptional, and impacts minor.

Recreating: After the mine closure, 3,900 fewer acres would be available for recreating activities.

“The Project would bisect the Tonka Creek road precluding continuous or “loop” travel through the area during active mining operations” (Final EIS Emigrant Mine, 2010).

Land access: During the active mining stage the part of Tonka Creek road is blocked from the public access, the “loop” around mining is available. After the closure of mining, the road will be re-constructed.
Visual resources: The pit and waste rock facilities impact on the visual resources. “Views of the majority of mining activities would be hidden from view by canyon walls and higher ridge landforms to the north and east.” (Final EIS. Emigrant Mine Project S-12 Summary. 2010).

Cultural resources:

“Forty-three cultural resources are located within the Area of Potential Effect (APE). Of these, three prehistoric period resources (CrNV-12-13259, -13261, and -13272) have been determined eligible for the National Register based on Criterion D”. (Final EIS. Emigrant Mine S-12 Summary. 2010).

Native Americans Concerns: According to the EIS, no impact will be created on the Western Shoshone traditional cultural values, practices, properties, or human remains.

Social and Economic recourses: The project has 180 employees from the Carlin Trend area. During the construction period, 100 employees were hired for a 12 months period. Together with retail and service sector more than 300 jobs were created, with $19.3 million in annual wages.

“Property and net proceeds of mining taxes paid by Newmont for the Emigrant Project collected by local and state jurisdictions would also continue”. Final EIS. Emigrant Mine. S-12 Summary. 2010).

3.3 Stakeholders Engagement for the Emigrant Mine.

Identification of the stakeholder's list is the first step for the development of a stakeholder engagement plan. Newmont has a sophisticated present program that is applied to new projects in Northern Nevada, and is based on interactions with previous projects over the past 30+ years. Especially for the Emigrant Mine, Newmont has long established relations with neighbors, since the Emigrant Mine is at the south end of the Carlin Trent and immediately southeast of the Rain Mine. However, using the Emigrant Mine as a surrogate for the development of a Stakeholder Engagement Plan, several factors should be considered. For the Emigrant Mine the interested community of local
residents and environmental NGO’s are spread over a substantial distance from the mine. Two groups have been most concerned about the mine, particularly the local ranching community, who will receive a larger impact from the mine due to limitations on access to grazing land. The NGO community has had concerns about the mine over the past 10 years, although less so now than in the past.

This mine is generally not expected to arouse much interest in the larger community, primarily since it does not have wide spread impacts, does not consume a large amount of water and the rock chemistry is now determined to be rather benign. In addition, this area has a very low population density, and no substantial opposition has arisen from the Native American community.

However, using this mine as a surrogate mine, the goals for the stakeholders’ engagement can be established. The International Association for Public Participation provided the spectrum for these objectives. See Table 3.5. (International Association for Public Participation (IAP2) 2007).

**Table 3.5. Stakeholder engagement goals**

<table>
<thead>
<tr>
<th>Stakeholder engagement goals</th>
<th>Inform</th>
<th>Consult</th>
<th>Involve</th>
<th>Collaborate</th>
<th>Empower</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide balanced, objective, accurate and consistent information to assist stakeholders to understand the problem, alternatives, opportunities and/or solutions.</td>
<td>To obtain feedback from stakeholders on analysis, alternatives, and/or outcomes.</td>
<td>To work directly with stakeholders throughout the process to ensure that their concerns and needs are consistently understood and considered</td>
<td>To partner with the stakeholder including the development of alternatives, making decisions and the identification of preferred solutions.</td>
<td>To place final decision-making in the hands of the stakeholder. Stakeholders are enabled or equipped to contribute actively to the achievement of outcomes.</td>
<td></td>
</tr>
<tr>
<td>Promise to stakeholders</td>
<td>We will keep you informed.</td>
<td>We will keep you informed, listen to and acknowledge concerns and aspirations,</td>
<td>We will work with you to ensure that your concerns and aspirations</td>
<td>We will look to you for advice and innovation in formulating solutions and incorporate your advice and decisions</td>
<td>We will implement what you decide. We will support and complement</td>
</tr>
</tbody>
</table>
and provide feedback on how stakeholder input influenced the outcome.

aspirations are directly reflected in the alternatives developed and provide feedback on how stakeholder input influenced the outcome.

recommendations into the outcomes to the maximum extent possible

methods of engagement

<table>
<thead>
<tr>
<th>Methods of engagement</th>
<th>Benefits for the project</th>
<th>Benefits for Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact sheets; Open houses; Newsletters, bulletins, circulars; Websites.</td>
<td>- Higher quality decision-making; - Increased efficiency in and effectiveness of service delivery; - Improved risk management practices, allowing risks to be identified and considered earlier, thereby reducing future costs; - Streamlined policy and program development processes; - Greater engagement with stakeholder interests;</td>
<td>- Greater opportunities to contribute directly to policy and program development; - More open and transparent lines of communication; - Increasing the accountability of Government and driving innovation; - Improved access to decision-</td>
</tr>
<tr>
<td>Public comment; Focus groups; Surveys; Public meetings.</td>
<td>Workshops; Deliberative polling; Forums</td>
<td>Reference groups; Facilitated consensus; Building forums for deliberation and decision-making; Experimental projects.</td>
</tr>
</tbody>
</table>

The benefits from the stackholder's engagement include the development of dialog between the mining company and community representatives, which can reduce the possible conflicts around the mining operation. Other benefits are provided in the Table 3.6.

Table 3.6. Benefits from Stakeholders engagement (Stakeholder Engagement Framework, 2011).
- Ensuring services are delivered in collaboration with stakeholders and provide outcomes that meet community needs;
- Enhanced community confidence in projects undertaken;
- Enhanced capacity to innovate.

| making processes, resulting in the delivery of more efficient and responsive services; |
| - Early identification of synergies between stakeholder and Government work, encouraging integrated and comprehensive solutions to complex policy issues. |

The International Association for Public Participation also provides the benefits from Stakeholders Engagement:

“Effective collaboration and partnerships; Knowledge sharing and collective learning; Aligned and efficient processes; Transparency; Capable and empowered workforce” (International Association for Public Participation (IAP2) 2007).

Generally, the list of Stakeholders, must include the persons and organizations who are interested in the project and can be involved in the decision-making process regarding the mining operation. The first step in this process is to understand the goals for the engagement effort. What tangible products are desired from the stakeholder engagement?

The following list adopted from Stakeholder Engagement Framework was used as a sample of stakeholders for the Emigrant Mine:

- Owners (e.g., investors, shareholders, agents, analysts, and rating agencies).
- Customers (e.g., direct customers, indirect customers, and advocates).
- Employees (e.g., current employees, potential employees, retirees, representatives, and dependents).
- Industry (e.g., suppliers, competitors, industry associations, industry opinion leaders, and media).
- Community (e.g., residents near company facilities, chambers of commerce, resident associations, schools, community organizations, and special interest groups).
- Environment (e.g., nature, nonhuman species, future generations, scientists, ecologists, spiritual communities, advocates, and NGOs)
- Government (e.g., public authorities and local policymakers; regulators; and opinion leaders).
- Civil society organizations (e.g., NGOs, faith-based organizations, and labor unions).


All representatives have a different level of influence and impact from Emigrant Mine and can be place into a Stakeholders Matrix, which will be discussed further.

**Emigrant Mine Stakeholders Map and Matrix.**

The stakeholders’ matrix and maps were based on the several characteristics, which were adopted from stakeholders classifications discussed in Breaking New Ground (2002). The stakeholders’ matrix shows the level of influence and interest in the Emigrant Mine. These characterizations are based on common experiences of interest groups involved with mining. Characteristics for the matrix include: Stakeholders with veto (veto); Stakeholders with a right to be compensated (right/compensation); Stakeholders with a right to consultation (right/consults); stakeholders who should be informed (inform). Interest categories represent commitment to status quo vs. openness to change (gradation from “–5” to “5”). Influence is based on the number of factors: “strength of their interest in the outcome, their legal rights, their access to external support, or their ability to block the outcome” (Breaking New Ground, 2002. p. 354).

Overall, the stakeholders’ characteristics must be established by the “logical group” of professionals, who are familiar with the stakeholders, and can provide the logical analysis of the level of influence and level of interest. For our research the
stakeholders’ characteristic is an example that shows how this method may be implemented.

Example for the stakeholders’ matrix with level of interest and influence represents in Table 3.7.

Examples for the stakeholders’ maps with level of interest and influence represents in Figures 3.1 and Figure 3.2.

Table 3.7. Carlin group matrix.

<table>
<thead>
<tr>
<th>Group Category</th>
<th>Characteristic</th>
<th>Interest</th>
<th>Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic organization (A)</td>
<td>1. Right/consult 2. Inform</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Farmer-Rancher (B)</td>
<td>1. Right/compensation 2. Right/consult 3. Inform</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Federal Government (C)</td>
<td>1. Veto 2. Right/consult 3. Inform</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Healthcare (D)</td>
<td>1. Right/consult 2. Inform 3. Veto</td>
<td>-3</td>
<td>1</td>
</tr>
<tr>
<td>Industry Association (E)</td>
<td>1. Right/consult 2. Inform</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Industry Partners (F)</td>
<td>1. Right/compensation 2. Right/consult 3. Inform</td>
<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>Local Government (G)</td>
<td>1. Right/consult 2. Inform 3. Veto</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Media Group (H)</td>
<td>1. Inform</td>
<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>Non-Profit (J)</td>
<td>1. Right/consult 2. Inform</td>
<td>1</td>
<td>-2</td>
</tr>
<tr>
<td>Special Interest Group (L)</td>
<td>1. Right/consult 2. Inform</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Academic organization for the Carlin group include stakeholders: Elko County
School District; Great Basin College; University of Nevada, Reno; Chamber of Commerce: Elko Chamber of Commerce.

Federal Government for the Carlin group include the stakeholders: Forest Service US Congress,
Healthcare: Elko Clinic; Golden Health Clinic; Golden Health Family Medical Center; Northeastern Nevada Regional Hospital.
Industry Association: CAT Logistics Shared Services Distribution Center; National Mining Association; Nevada Mining Association.
Industry Partners: Barrick, General Moly
Local Government: Carlin City Government, Elko City Government, Elko County Government; Elko County Sheriff's Office; Elko Fire Department; Elko Police Department; Eureka County Government; Eureka County Sheriff's Office
Media Group: Elko Broadcasting Company; KENV News; KRJC Radio; Ruby Radio Corporation
Non-Governmental Organization (NGOs): Great Basin Resource Watch; Northeastern Nevada Stewardship Group; Western Shoshone Defense Project.
Non-Profit: Elko Bighorns Unlimited; Elko Grammar #2 PTA; Elko Senior Olympic Games; Elko Velo Cycling Club; Friends of the Elko County Library; Great Basin College Continuing Education; Horizon Hospice; Idaho State University Foundation; National Wild Turkey Federation- Elko; Northeastern Nevada Museum; PACE Coalition; POWMIA; Spring Creek Christian Academy
Regulator: Bureau of Land Management; Nevada Division of Environmental Protection.
Special Interest Group: Downtown Business Association; Elko Convention and Visitors Authority; Local Union #3; Northern Nevada Regional Development Authority; Spring Creek Association.
State Government: Governor's Office; Nevada Department of Transportation; Nevada Department of Wildlife. Tribal: Elko Band Council; South Fork Band; Te-Moak Tribe of the Western Shoshone.
Figure 3.1. Carlin Group Stakeholders Map 1.

Figure 3.2. Carlin Group Stakeholders Map 2. The circled area represent the more valuable stakeholders, in that they have both strong interest and influence.

The next step in the process is to analyze the linkage between stakeholders and to choose the stakeholder’s engagement methods.

For the Emigrant Mine, linkage between stakeholders is not very strong and communications will likely occur through public meetings with the local government and mining representatives. These relationships should be managed to create open lines of communication and establish dialog between stakeholders, related to their characteristics and level of interest in the mine project. The stakeholder’s engagement plan should be based on the timing and available resources of the mining company, understanding the goals of the engagement, and what is the “key message” the company wants to provide for the stakeholders, and on the analysis of the risks from engagement. The risk evaluation can include:

“- Stakeholders having a different understanding of the engagement objectives and different expectations about the outcomes of the engagement process;
- Stakeholders feeling excluded from the process, for example if they are unable to attend engagement activities due to their geographic location;
- Stakeholders have insufficient time to contribute fully or to raise concerns, for example, due to short project timelines” (International Association for Public Participation (IAP2) 2007).

The stakeholders’ engagement methods are provided in Table 3.8. For the Emigrant Mine the following goals and methods of engagement include:

1. Objectives: to keep stakeholders informed about the project, and to provide balanced, objective, accurate and consistent information to ensure that stakeholders understand the problem, as well as alternative opportunities and solutions regarding the mine site.

2. The first method of engagement is a survey, which was implemented through the “Survey-Monkey” web page, to collect data related to public opinion about the Emigrant Mine site, major concerns and matters relating to the impact on the environment and the community. The second method is media involvement, which was
implemented through the local newspaper to keep stakeholders informed. The last method is a public meeting to educate stakeholders about the mining operation and create a dialog to discuss the possible alternatives.

3. The key message for the stakeholders is: “Access to the information regarding the Emigrant Mine operation can be beneficial for everybody. As well, this information must be used for the future dialogs between the Newmont and stakeholders”.

4. Format managing risk strategies include the description to all stakeholders that engagement may not result in significant changes in the mining operation, and at least initially, it is just exchange of information and opinions that can be used for the future purposes. The significant risk is to create expectations for the stakeholders that cannot be implemented in the near future.
<table>
<thead>
<tr>
<th>Method</th>
<th>Benefits</th>
<th>Limitations</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fact sheets</strong>&lt;br&gt;Usually brief, paper based on online documents that summaries the ‘facts’.</td>
<td>1. Able to reach a large number of stakeholders in a simple, efficient way.&lt;br&gt;2. Can be targeted to a particular stakeholder group and developed into languages other than English.</td>
<td>1. May is not accessible to people with visual impairment or low literacy levels.</td>
<td>1. Should be tailored to the relevant needs of the recipients.</td>
</tr>
<tr>
<td><strong>Information sharing</strong>&lt;br&gt;Information sessions, emails, newsletters, circulars, and websites.</td>
<td>1. Able to reach a large number of stakeholders.&lt;br&gt;2. Can be targeted to specific stakeholder groups.</td>
<td>1. Written material may not be accessible to people with visual impairment or low literacy levels.</td>
<td>1. Method and content should be tailored to the stakeholder group.</td>
</tr>
<tr>
<td><strong>Survey</strong>&lt;br&gt;A quantitative research method to gauge views, experiences and behaviors.</td>
<td>1. Straightforward.&lt;br&gt;2. Focused and specific.&lt;br&gt;3. Can gauge a large number of opinions.&lt;br&gt;4. Easily adapted.</td>
<td>1. Hard to gather qualitative information.&lt;br&gt;2. Answers may be irrelevant.&lt;br&gt;3. Delivery methods can affect results.</td>
<td>1. Always include open-ended questions and space for fuller comments.</td>
</tr>
<tr>
<td><strong>Opinion polls</strong>&lt;br&gt;A research method used to extrapolate results and determine what people think about an issue.</td>
<td>1. Quick and cheap.&lt;br&gt;2. Provides a snapshot of opinions at a particular time.&lt;br&gt;3. Straightforward and accurate.</td>
<td>1. May be too brief for people to provide their full opinions.&lt;br&gt;2. Results may be influenced if questions are worded incorrectly.</td>
<td></td>
</tr>
<tr>
<td><strong>Workshops</strong>&lt;br&gt;Facilitated events designed to enable stakeholders to work actively and collaboratively on a common</td>
<td>1. Discussing complex issues, analyzing competing options and generating ideas.&lt;br&gt;2. Encourages joint working and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Facilitation is crucial.</td>
</tr>
<tr>
<td>Method</td>
<td>Benefits</td>
<td>Challenges</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
| Expert panel      | 1. Focus intently on a particular subject.  
2. Produce in-depth analysis.  
3. Experts can often be objective.  | 1. The process needs to be carefully focused.  
2. Breadth may be limited.  
3. Maybe too ‘exclusive.’ | 1. If the group is large, facilitation will be necessary. |
| Public meetings   | 1. Opportunity for stakeholders to raise issues and ask questions.  
2. Opportunity to gather support for new ideas and build relationships.  
3. Communicate with large groups. | 1. If the group is large, facilitation will be necessary. | |
| Interviews        | 1. Best way to obtain qualitative information from an individual.  
2. Can produce highly accurate results.  
2. Large numbers are required to ensure accurate results.  
3. Careful preparation necessary. | |
| Web               | 1. Useful for diverse and extensive input.  
2. Enable access to views and ability to provide feedback.  
3. Measuring website statistics can also track stakeholder interest. | 1. Participation limited to those with access to IT.  
2. Can be expensive to develop and maintain. | |
| Action Research   | 1. Provides useful qualitative data.  
2. Is inclusive.  
3. Is flexible and responsible and can support problem-solving, and | 1. Difficult to gather qualitative information.  
2. Answers may be irrelevant.  
3. Delivery methods can | |

<table>
<thead>
<tr>
<th><strong>identify and test solutions.</strong></th>
<th><strong>solution testing as the process evolves.</strong></th>
<th><strong>affect results.</strong></th>
</tr>
</thead>
</table>
| **Advisory committees**
Committees made up of representatives from a profession, industry, peak bodies, etc. who are appointed to provide detailed or accurate information. | 1. Value a wide range of technical and local expert knowledge.
2. Support a range of engagement processes (ie. research).
3. Enables information to be distributed to different stakeholder groups. | 1. May be too brief for people to provide their full opinions.
2. Results may be influenced if questions are worded incorrectly. |
| **Open space technology**
An extensive facilitation process that is based on the premise that stakeholders will take ownership of issues they feel strongly about, set the agenda, decide on the length of engagement and the outcomes. | 1. Allows a bottom-up agenda to emerge.
2. Inspires ownership and action.
3. Enables new alliances to form.
4. Ensures follow-up reflects the wishes of those who have high interest or might be impacted by outcomes. | 1. May is not accessible to people with visual impairment or low literacy levels. |
| **Future search conference**
A participative method often used to develop a shared future vision and plan around an issue. | 1. Can drive stakeholder and government action.
2. Involves a broad range of relevant stakeholders.
3. Develops stakeholder support and agreement. | 1. The process needs to be carefully focused.
2. Breadth may be limited.
3. Maybe too ‘exclusive.’ |
| **Participatory editing**
Stakeholders co-write reports and | 1. Builds ownership.
2. Reflects their informed views and | 1. Need to consider the stakeholder’s organizational |
documents and endorse the final report.

<table>
<thead>
<tr>
<th>Stakeholder Visioning</th>
<th>Stakeholder Visioning</th>
<th>Stakeholder Visioning</th>
<th>Stakeholder Visioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>An explorative method where stakeholders are asked to visualize innovatively what the future could look like and then inform follow-up plans, etc.</td>
<td>1. Large numbers and diverse stakeholders can be involved. 2. Relationship building exercise. 3. Utilizes the expertise and knowledge of stakeholders. 4. Generates planning. 5. Requires a number of facilitators. 6. Generates a lot of information and data for collation &amp; analysis.</td>
<td>1. Requires careful documentation and clarity of purpose to ensure sound links to concrete outcomes.</td>
<td>1. Community visioning can be expanded to accommodate a wide variety of people, younger people.</td>
</tr>
<tr>
<td>Co-design</td>
<td>1. Diverse contribution. 2. Builds relationships and increases commitment. 3. Enables experimentation.</td>
<td>1. The process needs to be carefully focused.</td>
<td></td>
</tr>
</tbody>
</table>

(Stakeholder Engagement Framework. USA Department of Education, 2011).
3.4 Goals of a GNA for Nevada operations

The focus of a GNA is to provide a written and enforceable agreement, negotiated between the concerned public and the respective mining company to respond to concerns from the public, when there is mutual benefit to maintaining a working relationship.

The goal of the GNA is to have open access for the public to the safety, health, and environmental information pertaining to the mining operation, as well as to educate the local communities about safe and sustainable mining practices that promote mutual acknowledgment of the need to build a relationship amenable to each other’s needs.

General strategies for a successful GNA are described in several documents, including: “Evaluating the Use of Good Neighbor Agreements for Environmental and Community Protection” (Kenney et al., 2004), and materials from the Fifth International Conference on Environmental Compliance and Enforcement (Citizen Enforcement: Tools for Effective Participation. 1998).

The following general principles exist:

A GNA is a contract between the mining company and members of the local community, NGOs, etc., that provides the necessary information for understanding the respective mine and offers a way for community participation in environmental protection and socio-economic practices. This includes, but is not limited to, the descriptions for the environmental protection policy and practice that are required at mines, as well as the information and understandable descriptions of waste management plans, plans for the corrective actions, the list of conventional permits from government agencies and descriptions how they are implemented in practice and how they support sustainable mining operations.

“GNAs include provisions for public disclosure of relevant company information and stakeholder audits, whereby citizens engage in direct, on-site evaluations of facilities to identify changes that may be needed to ensure environmental compliance, safety, and sustainability” (Citizen Enforcement: Tools for Effective Participation. 1998).

Ultimately, the first steps of developing the GNA or any practice related to the
The mining-public relationship, is to create a Stakeholders Engagement Plan, establishing a list of stakeholders, which should include all of those interested or affected by the mine project. The next step is to analyze characteristics of all these parties and determine the level of interest and level of their influence on the project. This step includes the stakeholders’ matrix and mapping development. Finally, methods for engagement of the stakeholders’ should be chosen. The methods usually will depend on the goals of engagement and available resources at a time, people, and budget. It is also important to recognize the possible risks from the engagement and include the risk evaluation in the development of the Stakeholder’s Engagement Plan.

Conflicts in the development of mining projects are now shared between the mining proponents, NGO’s and communities. Newmont, one of the world leaders in the gold production tries to minimize the possibility of conflicts with communities worldwide. However, new social and economic conditions increase this chance and bring new needs to develop responsible mining strategies.

The Stakeholder’s engagement plan should be the basis of communication between the mining operation and all interested parties. This plan will not work in every situation, and requires that both the mining industry and the neighbors are willing to participate in a cooperative manner. Failure of trust is likely to result in a failure of the Stakeholder’s engagement plan. Each Stakeholder’s engagement plan is liable to be different and as such will reflect concerns of the local community, addressing local issues with specific socioeconomic and geographic conditions and particular aspects of the mine being constructed. The GNA must be used only in addition to the environmental protection documents and permits by the respective jurisdiction(s) and will represent a further assurance for both the community as well as the mining company.

Both, the Stakeholder’s engagement and GNA is a unique way to provide the benefits both for mining operations and the local community to offer a mechanism for development of trust and communication that offer the potential to protect both mining and community interests, and can possibly reduce conflicts in resource development projects.
Chapter 4.

Conflict Resolution Mechanisms.

In many cases, despite opposition, a mine will be permitted although concerns will remain. Good Neighbor Agreements (GNA) offer benefits to the mine and mine opponents; organizations concerned about mine development have a way to propose mitigations, and from the mining company’s perspective permitting uncertainty is reduced. In the few successful agreements that have been established, both the mine proponents and critics have realized that open communication can resolve many of the complicated issues associated with mine development. (Lewis, 1996; Environmental Law Institute, 1998; Kenney et al., 2004; Zuzulock et. al., 2009).

Resolving conflict requires more than meeting regulatory requirements for air and water quality. Meaningful engagement, negotiation, involvement in decision-making and transparency are important. Conflicts in the development of mining projects are now common between the mining proponents, NGO’s and communities. These conflicts can sometimes be alleviated by early development of modes of communication, and a formal discussion format that allows airing of concerns and potential resolution of problems. New practices at mining operations consider the social needs and challenges of local communities that arise during the ordinary life of a mine. This is critical for the achievement of sustainable mining practices, and must be ready for implementation at mine sites anywhere.

While the notion of GNA has existed for several years, it has not been studied in any systematic manner. Each mine and each community is different, and the issues that provide the basis for concerns will vary on a site-specific basis. GNA’s require a series of compromises on all sides, but ideally will provide a win-win for each of the communities. (Gross et al., 2005; Baxamusa, 2008; Parks et al., 2009).

4.1 Building trust.

To build trust, the company needs to provide appropriate information to the community so stakeholders understand the company perspective. Meetings with staff and
consultants should not have just a formal, but also a personal character. The company should show its social credibility; the community must know that a company will keep its promises. It is very important that company’s employees should be included in the social life of the community at the early stages. Employees should have training as the “face” of the company and must be ready to answer questions in an informal atmosphere, and help solve small issues. Employee training should include not just information about the current and future issues of a company, but also teach employees from outside the area about the local culture. Employees need to be respectful of the culture, and not have stereotypes and prejudices. If possible, staff should speak the community’s native language.

The company needs to let the community know that they are open to feedback and to some modifications of operations and plans.

“This does not mean that every issue or request must be acted upon, but it does mean being clear with people about which aspects of the project are still open to modification based on their input, and which are not.” (Stakeholder Consultation Issue Paper, 2004).

To build trust, the mining company should give the community members a chance to express their issues and concerns related to the mine’s operation, and provide answers for all spectrums of questions. The company should also provide proper procedure for any activities related to the consultation and engagement.

4.2 Consultation.

Stakeholder consultation is a valuable tool to establish the trust. Consultation involves communication that is not one way. According to the International Finance Corporation (IFC):

“Consultation is a two-way process of dialog between the project company and its stakeholders. Stakeholder consultation is about initiating and sustaining constructive external relationships over time. Companies that start the process early and take a long-term, strategic view are, in essence, developing their local “social license to operate”” (IFC, 2012)
Consultation begins with listening, to understand how external parties view the project risks and opportunities, impacts and mitigations. In addition to being necessary for a trust relationship, stakeholder consultation can improve project designs and help the company identify and control risk. It is a beneficial process both for stakeholders and the mining company. Because every community is different, the company can learn about the local concerns and cultural aspects, identify risk sooner, and provide a larger pool of innovative solutions; it may lead to faster permitting. Because every mine is different, stakeholders receive answers and information related to the project, and have a forum in which to share advice and suggestions to minimize negative impact on the community life. They have a greater opportunity to have a real influence in mine decisions, an assurance of greater accountability at the mine, and development of lines of communication that can last for years.

**Planning consultation**

The general process of consultation is discussed here. Specific examples of some types of consultation, Stakeholder Engagement Plans or GNA, are also introduced.

Before engaging in consultation, a company needs to define who to consult with, on what topics and for what purpose (IFC, 2012). The difficulty in achieving this may depend on the local culture and community, and the purpose may depend on the stage of the project. At each stage, community opinion may need to be gathered, trust and collaboration developed, and expectations clarified.

A company also needs to research whether there are legal or regulatory requirements, including internal corporate policy or obligations to shareholders, which may change with the stage of the project.

General steps of good practice in consultation have been defined by the IFC. After stakeholder groups are identified, those most likely to be affected should be targeted, and should include both men and women, recognizing that they have different opinions and needs. Consultation should occur early enough in the process that the company can identify key issues and that the stakeholders can have an effect on the project. It must be conducted in a culturally-relevant and culturally-appropriate way, in
local languages, and be free from manipulation and coercion. It needs to be a true exchange of information and views, and the company should address issues that are raised.

It can be a challenge to provide a venue in which all stakeholders can participate. In rural areas, stakeholders and even the nearest communities may be spread out over a hundred miles, with government agencies and NGO’s even further away. Farmers and ranchers with an interest may be spread out over a wide area. A list of stakeholders may include: mining company owners, including investors; mine employees, including retirees and consultants; industry associations; chambers of commerce; schools, colleges, and universities; community organizations; scientists, including ecologists; religious groups; NGOS, including local and national ones; local and state regulators; labor unions; healthcare representatives and industries; media; utilities; and tribes.

The next challenge is in defining the goals of the engagement, as many stakeholders will have a wide variety, and potentially even opposing, goals. Some goals can be broad enough that there is general agreement that the topic is important, such as goals for the mining company to keep the community informed and provide assistance to residents in understanding the mining process, to hold information workshops, to listen to stakeholders, and to partner with stakeholders in developing alternatives where an initial proposal causes conflict.

Consultations should be documented to record who has been consulted and track the issues raised, and should be reported back to the stakeholders in a timely manner, at which time next steps should be voiced. This process should occur throughout the life of the mine (IFC 2012).

Sometimes it is not possible to engage communities just by themselves, for example in a situation where the local government and authorities do not allow it. In these situations, some level of engagement is still possible. Some methods include establishing a “village communication committee”, suggestion boxes, or people who are not employees to gather opinions or disperse information.

A village communication committee is elected to discuss company-community related affairs such as social programs. The condition is that the committee is not
involved in politics in any way. Suggestion boxes work in some contexts, not in others. The company needs to make sure that villagers know who is emptying the boxes and reading the messages.

Local people can be hired to conduct regular home visits to collect statistics or disseminate public health information. Such people are well-positioned to get a good sense of the social and political issues in the community. Similarly, independent NGOs or foundations may have more space to engage with stakeholders on an informal basis, even in areas where group gatherings are more difficult (www.cdainc.com).

**Gender considerations in consultation**

Building social responsibility for a mine project includes working with the community as a whole, and gender aspects are important for success. Consultation and engagement methods are different for women and men. The project will likely affect men and women in different ways.

The social roles of women depend on the society, and women in different societies will have different levels of education, access to jobs, religious aspects, and local traditions. However, there can be commonalities in the way they understand information, the best way to communicate with them, in common problems women have all around the world, and objectives that are more important for women with regards to family, children, and the elderly. Sociologically, women think more broadly than men; they can think about several things in one moment. Knowing this, a mining company should provide the full spectrum of impacts and benefits, including children’s programs, benefits for older generations, and the long–time perspective. The company should describe how the benefits will affect men and women separately; that is, they should not lump all the data together, but understand the impacts on women are different than impacts on men (Wood & Eagly, 2002).

The staff who are in the meeting must include women because women may be more comfortable talking to other women. Working with a “predominantly female membership” may help to create a positive image of the company.

At least half the people in a community meeting should be women in order to provide a feeling that the community as a whole is involved. This may mean making the
meeting attendance suitable for the women – provide childcare, choose a proper location and time, and provide safe transportation after meeting.

It may be useful to create some separate meetings with just women to provide a chance to listen to their concerns and respond properly. Use a diverse network to increase the number of participants, such as a school or kindergarten groups, churches, women clubs, and health providers.

Sometimes the women have a lot of power, and it may be important to have their support. Building trust with women will also minimize the difficulty in building trust with men. The company should understand the issues and priorities of women in the area as an essential part of building the trust with the community. However, it is important to keep in mind that

“*All women will not necessarily have the same interests or priorities. Therefore, when involving women in consultations, attention is needed to ensure representation of different perspectives across socioeconomic, caste, ethnic, and religious lines. Marital status and age can also be important factors*. (Stakeholder Consultation Issue Paper, 2004).

**Consulting with indigenous people**

Consultation with indigenous peoples is often different than with other communities. Preparing for consultation requires more time and more research. This group may include people who have been marginalized, in poor living conditions, with a low level of education. They have frequently experienced a generational

“*loss of identity, culture, traditional lands, and natural resource-based livelihoods*” (Stakeholder Consultation Issue Paper, 2004).

Deep preparation is necessary, and consultants need to understand well the culture, traditions, economic and environmental concerns as well as the tribal lifestyle. As with consultation with other groups, it is important to identify the communities most likely to be affected and to determine the key issues for consultation, but these may be different than issues for other communities, even those in the same area. Tribal leaders and appropriate representatives need to be identified and involved as soon as possible,
which may require understanding the tribe’s language. The company needs to determine whether tribal representatives require assistance from experts or others to ensure consultation is carried out on equal terms. Given that indigenous communities are not necessarily homogenous, the company needs to determine to what degree individuals adequately represent the people, whether there are groups, such as women, youth, and the elderly, who are not represented, and whether parallel communications are needed for these groups (www.ilo.org).

It is important to establish a place located near the tribe for the consultation. The meeting format is also very important, and striking the right balance between an informal and formal style; before the meeting, think about the image that will be presented.

Collecting responses from indigenous community also takes more time than usual. It is important that people understand the consultation subjects – sometimes it will take more time and “re-consult” is possible. Therefore the timeline for consultation and discussion may be different from other communities.

Instilling cultural awareness in employees and staff is important. They must be ready to build a respectful relationship without stereotypes, and be friendly and positive.

“The aim is to ensure cultural appropriateness and to help affected communities gain a genuine understanding of the impacts of the project and the proposed mitigation measures and benefits. Ways to do this include translating project information into the appropriate indigenous languages, taking oral traditions into account, and developing audio-visual materials where appropriate. It may also be necessary to adopt non-document based means of communication, such as community briefings and radio programs. A key question to pose is whether all members of the community understand how the project may affect them and can communicate their concerns, leading to their potentially benefiting from the project” (Stakeholder Consultation Issue Paper, 2004).

There may also be different legal requirements based on national laws and international conventions, including the right to free, prior, and informed consent (FPIC). The concept of FPIC has been ratified at the United Nations (UN) by 17 countries,
including 13 in Latin America. Under Article 6, governments are required to undertake consultation in good faith with the objective of achieving agreement or consent, and specifically:

(a) Consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures that may affect them directly;

(b) Establish means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in elective institutions and administrative and other bodies responsible for policies and programs which concern them;

(c) Establish means for the full development of these peoples’ institutions and initiatives, and in appropriate cases provide the resources necessary for this purpose.

Article 15 addresses land issues which would pertain to mining, requiring that natural resources on indigenous lands shall not be developed without their participation in the management and conservation decisions. When the State owns the mineral or subsurface resources, the State must:

“establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programs for the exploration or exploitation of such resources pertaining to their lands. The peoples concerned shall wherever possible participate in the benefits of such activities, and shall receive fair compensation for any damages that they may sustain as a result of such activities.”

4.3 Good Neighbor Agreements.

One conflict resolution mechanism that incorporates the consultation process is the GNA. The goal of a GNA is to build a productive relationship between the mining company and local communities, to promote sustainable economic development, to decrease the environmental impact of mining operations, and to provide a means for dispute
resolution. It should also reconcile business profitability with community welfare, including environmental and public health (Lewis and Henkels, 1996).

Establishing trust is the first step towards developing a GNA. Specific parties that are willing to develop and potentially be signatories to a GNA need to be defined. The next step is to define the goal(s), including environmental and socio-economic goals, specific to one mine in one location. Participants must be willing to seek compromise to resolve a broad range of issues and establish benefits for all parties, and all parties share responsibility. The final document is legally binding and is intended to last for the life of the mine.

A GNA needs to specifically describe the parties in agreement, which must include the mining company and may include various citizen’s groups and NGO’s. The funding mechanisms for third party review, baseline data collection, audits, environmental monitoring and reclamation need to be defined, along with the degree of public access to the data. Committees need to be formed to review mining, mitigation, and reclamation technologies; for dispute resolution; and to be empowered with decision making. This is above and beyond state and federal permitting requirements in that it is tailored to community concerns and community benefits, and can be designed to be more protective of the environment than state and federal regulations require.

Community obligations

A GNA is a process that continues throughout mine life. The community itself, as signatories, is invested in decision-making and needs to be willing to devote time to the process for years, and potentially decades. All signatories, not just the mining company, need to be willing to invest financially in the process, for example in hiring technical consultants and financing environmental reviews and audits. This means the community needs to invest in understanding technologies, the cost of implementing them, and all parts of the mining process at the mine.

Because the process will continue for decades, having key people that can make a commitment on that time scale is extremely useful, as they can transfer knowledge to new people that join over time. New people will need to learn about the process, committees, previous work that has been done, and expectations and goals of the GNA
signatories. Each new person will have their own area of interest – which may be the environment, public health, community infrastructure, local training, and so forth – and develop their own level of trust in other individuals and the GNA process in general. New individuals can be expected to enter the GNA from both the mining company and the community organizations.

The GNA will not change even if the owners of the mining company change.

**Company obligations**

The mining company itself needs to be willing to commit time and resources, and to share decision making. Traditionally, mining companies only have to meet permit requirements – there is little involvement of state or federal agencies in mine decision making outside of permit renewal obligations. Budget issues, monitoring resources, the opportunity and willingness to identify local concerns, factor into success of a GNA. Individual personalities can be important in developing trust relationships that are critical to moving the process forward.

Mining companies need to be committed to educating stakeholders about safe and sustainable mining practices and the global mining economy, and provide tools for safety training. This may include offering community open houses, community meetings, invitations to media, and hiring local people.

They need to recognize that the community’s needs are as valid as their own, and make provisions for indigenous communities, including promoting experiential exchanges for traditional and non-market activities. They need to actively listen, and respond to the issues raised.

Lastly, they need to provide access to independent experts, technical consultants, and academics.

**Limitations of a generic GNA.**

Risk management for a mine project includes determining the limiting factors of social responsibility mechanisms. In developing and implementing a GNA, there are many factors at play that could make it difficult for a GNA to be realized. For example, there are geopolitical considerations. Many companies have multiple mines in different
countries, all with different needs, potentially creating difficulty if they set a precedent by implementing a GNA in one country. In some places, they may not be possible because there is weak federal and local regulatory oversight or a poor legal system or the area in question is within a war zone with no reliable parties to represent stakeholders.

Within communities, who must partner with companies to create a GNA, intractable disagreement between community members or widely dispersed interests that cannot all be met could prevent a GNA from being formed. If a GNA is formed, it may fall apart due to lack of interest over time.

The GNA should be used only in addition to the environmental protection documents and permits by the respective jurisdiction(s), GNA should be site-specific; and the GNA must provide public access to health, safety, and environmental information related to the mining operation.
Chapter 5.

Reducing Risk through Communication.

5.1 Risk management at mining corporations.

Mining companies, as well as communities, face environmental, social, and economic risks. The specific concerns differ with the level of management, and by the size of the company. Communities generally have greater expectations from larger companies, and it may be difficult for some small companies to take on as much as larger ones – for example, they may not be able to fund development of new community wells. Large companies may be concerned about stock prices; small companies may be concerned about losing their property entirely. The size of the company may also have an effect on the relations with the government. For example, the larger companies may have a better equipped staff to respond to regulatory requirements, and smaller companies, particularly those running on the edge may not be able to afford changing requirements.

Companies that develop large mines frequently have mines in many countries. Therefore the risk may be categorized and managed into those risks that can be best handled at the head corporate office, such as market prices, available capital, and changing regulations in different countries, and other risks that are best faced at the local level (field office), such as local government and local community concerns and goals (MacDonald, 2002).

The view of a corporate office on risk, and how risk has changed over the past 25 years, is shown in Table 5.1. Local offices will have risks that align more closely with the concerns of the local community.

Table 5.1. The changing nature of risk, 1987-2001 (adapted from MacDonald, 2002)

<table>
<thead>
<tr>
<th>Risk type</th>
<th>Political (Social)</th>
<th>Economic</th>
<th>Exploration</th>
<th>Intra-firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>National bureaucracy and global political economy</td>
<td>Cyclical commodity price changes</td>
<td>Lack of knowledge of areas/ Poor geological records</td>
<td>Inertial risk/ (inability to invest in FDA)</td>
</tr>
</tbody>
</table>
To a large degree, a corporate office may consider the package of issues raised by a community to represent “social risk” – regardless of whether communities and stakeholders consider them environmental, social, or economic risks.

### 5.2 Social responsibility.

The concept of social responsibility, or corporate social responsibility (CSR), has become increasingly important. In 2005, the Kennedy School of Government published “Corporate Social Responsibility as Risk Management”, with a goal to:

> “develop a conceptual framework for companies to manage the emerging social risks they encounter as they go global, and of the contribution of corporate social responsibility programs to managing those risks” (Beth and Rugge, 2005)

The report recognizes that there has been a significant shift in market power in the global arena. Social risk recognizes that stakeholders may have the power to bring about behavioral change in companies, for example in labor standards, human rights, and environmental standards (Beth and Rugge 2005).

Social Risk = Threat \( (\text{Stakeholder} + \text{Issue}) \times (\text{Vulnerability}) \)

From this perspective, managing the social risk becomes a competitive necessity, which requires understanding the stakeholders involved, their issues, and the vulnerability of the company to community/stakeholder power. A company will want to develop “controls and countermeasures” that will successfully navigate the risk and move a mine into permitting and production.

**Stakeholders**

One of the first steps in a communication strategy is to know the audience, and identify the key influencers. For the corporate-level communicators, the important audience is shareholders and investors, global organizations, international NGOs, top-tier media, and all employees. At the field-office (asset) level, the priority audiences for
Communicators are broader but geographically localized. They include local communities, local and national government, local media, local NGOs, employees, and, increasingly, contractors. Corporate and asset level communications need to synchronize – while corporate focuses on the message of what the company stands for and what it does, and the asset level focuses on building capacity at the mine site, both sets of communications should align.

Influence is not static. A critical part of the job of communication specialists is to regularly examine priority relationships and the degree to which they have been cultivated.

“Disconnect with the priorities of stakeholders can be costly.... missing an opportunity to support business and strategic aims with proactive communications; playing “catch up” or “clean up” as different divisions forge ahead; having too weak a “radar” (or one that is broken) for understanding or anticipating stakeholder needs and for anticipating issues before they arise; lacking quick response and seamlessness among departments” (ICMM 2013)

**Issue cycles**

From the company perspective, understanding the substance and intensity of stakeholder relations is critical. These may involve global systems, not just the issues of a single stakeholder or specific regions. It will involve “learning, sensing, and innovation” (Beth and Rugge 2005). It certainly involves understanding the “life cycle” of issues, and where the company stands in the cycle. The “life cycle” has been described as

“In the first phase, a few people raise the issue and sway others to their viewpoint. When there is a critical mass, the issues move to stage two. In phase two, the activists from organizations aiming to change laws, regulations, or cultural norms, as the case may be. When public opinion starts to change, the issue can move to phase three where the politicians begin to legitimize it by launching studies on the legislative or regulatory changes that would be needed. In the final phase, the laws, regulations, or norms are changed, and those affected by the changes are monitored for compliance” (Boutilier, 2014)
In the early phase of the “life” of an issue, the mining company has more power or ability to direct opinion, but over time, if the issue grows as a concern, this ability decreases.

“It is tempting to dismiss stakeholder groups that complain about your organization as representing the fringe of public opinion. Often the majority disagrees with them, and sometimes public opinion polls even prove it. The problem with ignoring such groups is the risk that they will become public opinion leaders” (Boutilier, 2014)

Social license to operate

The idea of a “social license to operate” (SLO) was introduced in 1997 by Jim Cooney, Director of International and Public Affairs with Placer Dome at a meeting with the World Bank. The SLO is:

“Granted on a site-specific basis, granted by the community, includes the importance of a network of stakeholders, not granted by a single group, organization or government” (Evans, Kemp, 2011)

Successfully managing social risk may result in having an SLO granted. The process of earning an SLO is the process of managing risk: initial withholding/withdrawal of social license is followed by development of a “legitimacy boundary” that recognizes mining as a legitimate activity and acceptance, a “credibility boundary” and approval, and finally a “full trust boundary” and co-ownership. Co-ownership means that the community has responsibility for the company’s success. It is obvious that communication plays the essential role in building this type of partnership.

Developing a risk reduction strategy

A company must first analyze the economic risks dependent, but it must also be ready to adapt to a new social environment. Long-term planning must include management of both the economic and social risks; that is, managing social risk should be as much a part of strategic planning as economic risk management.
Middle- and large-scale companies need to communicate at the local government on the state level, to ensure local governments understand what the mining company can and cannot do. Small companies need to have a public relations (PR) representative and a lawyer or local consultants who are familiar with local government, again to ensure that there is clear communication about expectations.

The mining company should create a “positive mining climate” based on the level of political risk, taxation policy, and personal experience in the area, environmental regulations, and proper permitting. Part of creating a positive mining climate is proactive community engagement, by educating the community about the companies’ social responsibilities and mining culture, as well as the types of risks.

5.3 Fundamentals of communication.

Communication plays a strategic role in securing a social license to operate. Communication is not “messaging” and it is not one-way, from company to community. It is internal and external, involves multiple stakeholders, and is iterative over time. Communications needs to be an expected part of the budget for a project, and it needs to start early in the process.

Although communications must be aligned with stakeholders’ engagement and other functions, the company and spokespeople need to understand that:

“Communications and engagement work on different timelines. Communications are about a quick turn-around with lots of output, whereas engagement is on a longer timeline... more fluid.” (Beth and Rugge, 2005).

Creating an environment for stakeholder dialogue

Any mine is going to have a significant impact on the environment and the lives of people. An effective environment for communication must include methods that allow stakeholders to fully understand mining issues, while being willing to listen to understand stakeholder issues. Part of this may mean being able to literally communicate in the language of the local stakeholders and understanding cultural differences. It may also mean ensuring that when numbers are used to convey information, they are understood; and if not, other methods are explored to convey information in a meaningful way.
“This requires ... planning proactive and coordinated campaigns to engage key audiences. Listening as well as talking is required”. (ICMM 2013)

This environment needs to be cultivated early in the process, and not as a crisis response.

“Crisis response-driven communications are typically too late. But when operational teams are stretched to the limit, especially when budgets are cut back, it can be difficult to focus on what does not seem urgent, such as building relationships. We start responding when investors start screaming, which is usually the result of NGO action or reports in the press”. (ICMM 2013)

The company needs to provide full and clear information, and acknowledge the positive and negative impacts from the beginning. A good strategy is to describe the potential for a mine to contribute to a region’s development, and the social and economic benefits. However, it is critical in building trust relationships to be honest about the potential negative aspects, and ways to minimize them. For transparency, the company should promote the idea of independent specialists to conduct monitoring and evaluation of mining impacts. The results must be open to the public, preferably digital, and shared with all stakeholders. The company needs to acknowledge that results must be regularly evaluated, and that they will implement needed corrections.

**Communication specialists**

Although it should not be the result of a crisis, communication does need to be flexible enough to respond to changing needs and concerns within the network of stakeholders, and to react quickly to the needs of diverse audiences. Communications must be connected to concerns. This requires recognizing and utilizing communication specialists as an integral part of risk management strategy, and training spokespeople at many different levels. Spokespeople must be provided with handbooks, tools, and strategies, and they must be updated on a regular basis. Communications teams may need to build reputation campaigns, manage globally dispersed teams, create crisis
response programs, develop impactful content and manage media relations in a 24/7
digital environment.

Different types of specialists must be brought in to communicate mining issues
and plans. By including representatives from different departments on the communication
team, and communication specialists, the diverse background will provide more ability to
“achieve a more cohesive company voice”. Companies that lead the field are investing in
targeted training for staff at different levels, which can carry out communications
activities. This goes hand in hand with creating standard processes and roles across the
organization in order to avoid duplication of effort or gaps.

**Partners**

Industry communications can have more impact when companies share one voice
on main topics such as water management, and if they work together to build skills and
knowledge such as training for communications with the media, civil society, and
academia.

Mining companies are increasingly partnering with civil society organizations,
global aid organizations and governments to communicate about issues related to mining
and communities. This is a relatively new trend in new opportunities and risks. Safety,
health, and the environment provide increased opportunities for partnership.

**Digital communications**

The mining company needs to go beyond developing a website to actively
participating in social networks such as Instagram, Facebook and Twitter as a fast way of
sharing information, increasing community engagement, and as an opportunity to listen.
All information must be provided in a way that is suitable for mobile devices. Companies
must regularly update information, posts, and pictures, as well as maintain discussions.
Social media provides an opportunity to understand and respond to emerging issues.

**5.4 Do’s and Don’ts of Communication.**

A general list of methods of communication that should and should not be
employed includes methods that are unidirectional and ones that provide opportunity for
listening and exchange.
**Command and control communications**

These communications include brochures, posters, videos, and mass media ads. Brochures can be used, preferably with hand-outs, to provide facts and information, including bad news and strategies to improve the situation; they should not be used as propaganda material. Posters and brochures can be used in the workplace to increase worker awareness, but they should be carefully designed and vetted for unintentional meanings, especially within indigenous communities.

Videos can be used inside or outside the workplace. Videos should use real employees in the field conditions. It is good to show positive examples and how current issues are solved in the real time, but they should not be used for propaganda, to give a speech, or to provide inaccurate information about the operation. Videos should be produced with caution, as they can be utilized in unintentional ways.

Mass media (radio, newspaper, television) can be utilized before and after meetings with stakeholders; do use humor, but do not make jokes about stakeholders or the community.

**Group communications**

Stakeholder analysis should be conducted through all phases of mining; a company should never assume they know all the stakeholder issues and are able to predict their actions.

Small group meetings are useful, and the smaller the better to establish effective communication; staff should come prepared, have facts on hand, and have good personal communication skills. With large groups, it is helpful to not only be well-prepared but to have support from some of the public listeners. Staff that is communicating should be professional and respectful, never using inappropriate language or criticizing the community, especially local leaders. The same do’s and don’t’s apply to debates with critics. See table 5.2. Do and Don’t in communication.

Media and video can be used in group communications as well as unilaterally. Invite reporters, politicians, and bureaucrats to the field site and introduce them to mine workers. Be punctual. Discuss social programs, and if possible do not discuss
unsuccessful examples. Be careful to understand the goals of politicians, and how the company may be used by them.

Where possible, get creative. Consider thematic role-playing games, where participants can be prepared with hand-outs and go over real examples and technology. Wherever possible, demonstrate respect, competence, and interest in stakeholder issues.

Table 5.2. Do and Don’t in communication.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Do</th>
<th>Don’t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brochures and posters</td>
<td>Provide facts and news; use humor</td>
<td>Avoid bad news and unintended meanings</td>
</tr>
<tr>
<td>Videos</td>
<td>Use real employees, current issues</td>
<td>Give a speech</td>
</tr>
<tr>
<td>Mass media</td>
<td>Use before and after meetings</td>
<td></td>
</tr>
<tr>
<td>Stakeholder analysis</td>
<td>Evaluate issues</td>
<td>Assume issues are static</td>
</tr>
<tr>
<td>Small group meetings</td>
<td>Have facts and good communicators; get creative</td>
<td>Come unprepared or late</td>
</tr>
<tr>
<td>Large group meetings</td>
<td>Have support in the group</td>
<td>Criticize community</td>
</tr>
<tr>
<td>Reporters</td>
<td>Take them on site</td>
<td>Provide information that makes the company look bad</td>
</tr>
<tr>
<td>Politicians</td>
<td>Take them on site</td>
<td>Let them use company for their own goals</td>
</tr>
</tbody>
</table>

5.5 Measuring impact.

Whether communication is successful must be measured as part of a company’s iterative pulse-check on relations with stakeholders. Measurement can be quantitative, for example, the frequency and quality of media hits, or qualitative, such as a review of public statements and comments, or perception studies that ask stakeholders directly about their views on company work.
Baseline and follow-up studies can be utilized to measure engagement and progress on main issues. Environmental and social baseline studies help establish business plans and credible messages. External studies help assess stakeholder engagement. Internal studies test norms and systems. Both are valuable tools that help identifying ways to reward good behavior and steer resources.

Measuring the effectiveness of communications needs to include analysis of social media as well, which again can be quantitative or qualitative. Technology can be used to track communication and the success of approaches.

When working with indigenous communities, the company should work with the community to determine the methods to measure impacts to indigenous lands, resources, and society. This will help ensure that sensitive areas are protected and community culture is respected.

**Survey and opinion polls**

The advantage of polling is that responses collected from stakeholders may be converted into statistically valid data for quantitative measurement. The difficulty is in obtaining the necessary number of responses.

To use a statistical program to analyze data the total number of responses must me no less than 100 and ideally more than 300. Sometimes it is difficult to find the proper contacts and receive that many answers. Responses must be demographically representative and include specific numbers of women and men responses together with the right age group representatives for the survey goals.

Another difficulty is the proper formulation of questions. They must be more than just “yes or no” questions or simple multiple-choice questions. If the company creates an online survey, it is easy to prepare the right questions and ask for an opinion. However, sometimes people avoid giving their true opinion in written format. It is easier to find the truth in personal, face to face conversation. For an online survey or opinion pool, the best tactic is to give people a choice between three options as well as provide some space for comments. An anonymous survey usually helps in determining what respondents were thinking.

It is best to find professional and independent experts to create a survey and
provide the opinion polls instead of using the company’s employees, because it will allow people to be more open.

**Focus groups**

Focus groups are more affordable, faster and easier way to collect the responses in comparison with opinion polls. However, it is more difficult to achieve the amount of responses needed for statistical analysis. People must feel comfortable to share their opinion, especially ideas about resolving some problems or concerns. To create this comfortable environment, the focus group must be small (ten people at the most) and with the right gender and age proportions. Sometimes it is a good strategy not to mix men and women, and young and old people in one group, but rather to

“use people who are likely to be comfortable talking to one another as equals”  
(Borders and Borders, 2002).

A comfortable environment also means finding the right location and meeting time for participants, sometimes providing transportation and snacks, and comfortable seats. A small gift for participants as a “thank you” for them volunteering their time may also be a good idea.

The best combination for conducting a focus group is to have two people - a discussion leader and a note-taker. Questions for the meeting must be prepared in advance, and the leader should be confident that all participants understand the questions. The discussion leader should be a professional, be familiar with local circumstances and issues, and never judge the participants’ opinions or educate them. The leader should know enough facts about the project to be ready to give a short answer related to any issues during the conversation.

Further suggestions include:

“The note-taker records the consensus on each question if there is one, plus any interesting individual answers. You can tape record or videotape focus groups if you ask permission beforehand, making it clear that nothing will be broadcast and that no individual will be identified or quoted. You can have additional spectators if you wish, providing that they are few and kept out of the way. If they jump in with questions, except at the very end, it will distract people, and the
conversation will suffer. Do not hold focus groups in government or company buildings if that may prejudice answers, and do not bring government officials or senior managers into focus groups for that will skew the answers.” (Borders and Borders, 2002).

Two focus groups with a similar stakeholder audience that provide similar results indicate the results will be largely the same throughout the entire stakeholder group. Two focus group samples are almost always a sufficient indicator of the opinions of the whole group. However, the results are always qualitative; statistical results cannot be derived from focus groups.

**Maintaining records of communications**

One of the most overlooked aspects of stakeholder engagement is the need to document and maintain records of communication activities, particularly public commitments, and bilateral dialogs. Company-funded public information centers with strong record keeping and grievance collection and response systems are now industry good practice standards.

**Summary**

Some of the questions that a company can revisit regularly include: How close are communications to the decision-making process? How much time is spent on short term crises versus long-term strategies? How well aligned are internal and external communication messages? Are communication materials more often ad-hoc/reactive or ongoing/iterative? How are stakeholders listened to and responded to? How are the communications measured? How communication are channels, including cell phones, radio, and social media, used to monitor/watch or to broadcast/engage?
Chapter 6.
The Survey “Mining Perceptions”:
Development, Implementation and Results.

In 2014-15 the University of Nevada, Reno (G.Miller group) conducted a survey “Mining Perceptions” among various stakeholders groups who mostly live in Northern Nevada where Newmont has several mines, regarding the Emigrant Rain Project and the general mining industry in Nevada. This survey has an approval from UNR’s Institutional Review Board (IRB) through the Research Integrity Office (UNR) consistent with the requirements of the Code of Federal Regulations on the Protection of Human Subject with an exception category #2, notice of acknowledgement FWA00002306 from 02/24/2014. (See appendix 7). This non-random survey is an initial step for the development stakeholders’ engagement plan. The purpose of the survey is to: 1. investigate perceptions of mining in the various communities and the mining industry in northern Nevada 2. understand the level of communication between mining companies and the various publics; and 3. examine potential methods for improving communication and resolving potential conflicts between neighbors and mining companies, their economies, and the environment.

Participants in the survey include: the employees from Newmont, residents from Elko, Battle Mountain, and Reno communities, geologists who work at various mining sites in Nevada, scientific and academic sphere representatives (Desert Reserch Institute (DRI) Reno, NV, U.S. and University of Nevada, Reno (Reno, NV, U.S.), and environmental NGOs. This survey is of groups and individuals who have, or may have, substantially different opinions on mining, and the results should be evaluated in that context.

We separated the responses for the periods when surveys were received electronically by applying the “Filter by Time Period” rule in the survey platform. All responses are separated on the three different groups of stakeholders:

a. Group 1 “Local residents”: a general public opinion from Elko, Battle Mountain, and Battle Mountain communities. This group has 38 responses. The
responses collected between 05/01/2014 – 07/01/2014.

b. Group 2 “Geologist network”: opinions were collected from the mining professionals audience. Survey was distributed through the Nevada Geological Society with 126 responses between 07/01/2014 - 09/01/2014.

c. Group 3 “Environmental community”: opinions from the environmental community interested in mining. The survey was distributed through the WMAN list serve, which is composed of environmentally concerned individuals who have worked on mining issues, primarily in the U.S. and Canada, but also on international environmental issues., 38 responses were received (03/10/2015 – 05/01/2015).

The full survey is provided in appendix 8.

The demographics of individuals in each group is listed below. Group 1, “Local residents” was 38% female and 62% male; Group 2, “Geologist network” was 17%-female and 82% male; Group 3, “Environmental Community” 48% female and 52% male.

Table 6.1a Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>I or someone in my family is working for the mining industry</td>
<td>32.4%</td>
</tr>
<tr>
<td>I am working in the service industry (hotel, food)</td>
<td>5.4%</td>
</tr>
<tr>
<td>I am primarily concerned about the social and environmental impacts of mining</td>
<td>32.4%</td>
</tr>
<tr>
<td>I am working in a government regulatory position</td>
<td>8.1%</td>
</tr>
<tr>
<td>I am not working in an occupation that is directly associated with the mining industry</td>
<td>40.5%</td>
</tr>
</tbody>
</table>

Total Respondents: 37

Table 6.1b Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I or someone in my family is working for the mining industry</td>
<td>73.1%</td>
</tr>
<tr>
<td>I am working in the service industry (hotel, food)</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
I am primarily concerned about the social and environmental impacts of mining | 17.7%

I am working in a government regulatory position | 2.5%

I am not working in an occupation that is directly associated with the mining industry | 15.9%

Total Respondents: 119

Table 6.1c Group 3 “Environmental community”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I or someone in my family is working for the mining industry</td>
<td>5.9%</td>
</tr>
<tr>
<td>I am working in the service industry (hotel, food)</td>
<td>5.9%</td>
</tr>
<tr>
<td>I am primarily concerned about the social and environmental impacts of mining</td>
<td>73.5%</td>
</tr>
<tr>
<td>I am working in a government regulatory position</td>
<td>0.0%</td>
</tr>
<tr>
<td>I am not working in an occupation that is directly associated with the mining industry</td>
<td>26.5%</td>
</tr>
</tbody>
</table>

Total Respondents: 34

The total number of responses collected during the open period is 202. The percentage of females of Group 1, as indicated above, was 38% female, and Group 2 was 17% female, and group 3 was 52% female. Group 1 was evenly split between working or having a family member working in the mining industry and having primarily a concern about the social and environmental impacts of mining. Groups 2 had approximately 73% of respondents working or having a family member working in the mining industry versus group 3 having primarily a concern about the social and environmental impacts of mining. Thus, while the sample size is not large and should perhaps be considered more of a focus group, the demographic differences between groups 2 and 3 are quite different, and can be used to assess differences in the perception of mining and how each group relates to mining.

Participants had the option to skip specific questions, which reflects the lower number of responses in some tables. The survey was closed on May 1, 2015. Except for the environmental community group, the differences between the other respondents were minor. While this lack of difference was initially unexpected, the general public surveys
mainly the communities in Northern Nevada, where mining is the economic driver of the economies. The Northern Nevada communities of Elko, Battle Mountain and Winnemucca exist in a mature mining area, where gold mining has been the dominant economic driver for over 30 years, and where both the employment and economy are dependent on mining. Thus, the lack of substantial differences in the survey results is not surprising.

The survey “Mining Perceptions” includes four different sections:
Section 1. Information sources and knowledge regarding mining practices;
Section 2. Sustainable Community Development;
Section 3. Environmental concerns and community life.
Section 4. Demographic information

The survey consisted of 26 total questions. Each question is presented below with a summary of the responses. Because of the lack of randomness, no statistical significance can be drawn from the responses, except as general opinions of groups of interested individuals.

Q1 If you need to find relevant mining permit and regulatory information from state and federal agencies related to a specific mining project, do you know where to look for it? Please choose one that applies. See tables 6.2a, 6.2b, and 6.2c.

Table 6.2a Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>56.1%</td>
</tr>
<tr>
<td>no</td>
<td>26.8%</td>
</tr>
<tr>
<td>not sure</td>
<td>17.1%</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 6.2b Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>52.5%</td>
</tr>
<tr>
<td>no</td>
<td>30.3%</td>
</tr>
<tr>
<td>not sure</td>
<td>17.2%</td>
</tr>
</tbody>
</table>
All three groups have more than 50% for the answer “yes” indicating that the majority of each group knows where information is available. However, each group also had 44-50% either not knowing or were unsure of where information could be obtained. This may reflect, in part, a lack of interest in obtaining information.

Q2 How much trust do you have in the information regarding a mining operation received from the following sources? Please choose only one answer per row. See figures 6.1a, 6.1b, and 6.1c.

Figure 6.1a. Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>50.0%</td>
</tr>
<tr>
<td>no</td>
<td>23.7%</td>
</tr>
<tr>
<td>not sure</td>
<td>26.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>
Figure 6.1b. Group 2 “Geologist network”.

Figure 6.1c. Group 3 “Environmental community”.
The local community does not appear to have high level of trust for any sources. However, the largest positive response received the mining companies that shows the readiness for the dialog between the residents and miners. The second level of the trust for the Group 1 are both academia and government. Probably, the independent experts for the community – miners’ communications process must be from academia. The Group 2 shows that the mining professionals has the extremely low level of trust to the environmental organizations. It’s supporting the opinion of independent experts, miners trust more the academic and government sources. The environmental community (Group 3) has the same high level of extremely low level of trust to the miners.

Q3 If you had an opportunity to meet with mining company representatives from a mine near you, how often would you want to have such a meeting to get an update on current mine development plans and other related issues? Please choose one that applies. See tables 6.3a, 6.3b, 6.3c.

<table>
<thead>
<tr>
<th>Table 6.3a Group 1 “Local residents”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answer Choices</strong></td>
</tr>
<tr>
<td>Yes, quarterly</td>
</tr>
<tr>
<td>Yes, semiannually</td>
</tr>
<tr>
<td>Yes, annually</td>
</tr>
<tr>
<td>Don’t want to meet with the mining company.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 6.3b Group 2 “Geologist network”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answer Choices</strong></td>
</tr>
<tr>
<td>Yes, quarterly</td>
</tr>
<tr>
<td>Yes, semiannually</td>
</tr>
<tr>
<td>Yes, annually</td>
</tr>
<tr>
<td>Don’t want to meet with the mining company.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 6.3c Group 3 “Environmental community”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answer Choices</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Yes, quarterly 59.5%
Yes, semiannually 16.2%
Yes, annually 10.8%
Don’t want to meet with the mining company. 13.5%
Total 37

Respondents in Groups 1 and 2 indicated a desire to meet with the mining company annually or semiannually, while the majority of the environmental community desired meetings quarterly. This perhaps indicates a level of trust for the first two groups, and a corresponding lack of trust from the environmental community, group 3.

Q4 If you (as a community member) desire to receive time-sensitive information from a mining company, which method will serve the purpose best? Please choose all that apply. See tables 6.4a, 6.4b, 6.4c.

Table 6.4a. Group 1. “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community meetings</td>
<td>45.0%</td>
</tr>
<tr>
<td>Contact with mining representatives</td>
<td>45.0%</td>
</tr>
<tr>
<td>Media (e.g. newspapers, TV)</td>
<td>30.0%</td>
</tr>
<tr>
<td>Community website</td>
<td>17.5%</td>
</tr>
<tr>
<td>Social networks (Facebook, LinkedIn, Twitter, etc.)</td>
<td>20.0%</td>
</tr>
<tr>
<td>Walls/News boards in the public places</td>
<td>7.5%</td>
</tr>
<tr>
<td>Email (7)</td>
<td>82.5%</td>
</tr>
</tbody>
</table>

Total Respondents: 40

Table 6.4b. Group 2. “Geologist network”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community meetings</td>
<td>38.5%</td>
</tr>
</tbody>
</table>
Email is the primary desired method of communication for all groups, although community meetings are also favored. The level of answers for the “contact with mining representatives” shows the need for the open houses and availability of the mining representatives at those meetings.

**Q5** If you were provided an opportunity to learn more about the mining industry, would you be interested in attending an informational event? If so, which of the following topics would you find interesting: Please choose only one answer per row. See figures 6.2a, 6.2b, and 6.2c.
Figure 6.2a. Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Area</th>
<th>Extremely High</th>
<th>High</th>
<th>Moderate</th>
<th>Low</th>
<th>Extremely Low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global mining market</td>
<td>7.7%</td>
<td>38.5%</td>
<td>28.2%</td>
<td>17.9%</td>
<td>7.7%</td>
<td>39</td>
<td>2.79</td>
</tr>
<tr>
<td>Understanding of the mining operations</td>
<td>15.0%</td>
<td>40.0%</td>
<td>27.5%</td>
<td>15.0%</td>
<td>2.5%</td>
<td>40</td>
<td>2.50</td>
</tr>
<tr>
<td>Understanding of the mining economy</td>
<td>20.0%</td>
<td>45.0%</td>
<td>22.5%</td>
<td>10.0%</td>
<td>2.5%</td>
<td>40</td>
<td>2.30</td>
</tr>
<tr>
<td>Environmental impact from mining industry</td>
<td>20.0%</td>
<td>25.0%</td>
<td>32.5%</td>
<td>20.0%</td>
<td>2.5%</td>
<td>40</td>
<td>2.60</td>
</tr>
<tr>
<td>Health concerns related to the operations</td>
<td>15.0%</td>
<td>37.5%</td>
<td>27.5%</td>
<td>17.5%</td>
<td>2.5%</td>
<td>40</td>
<td>2.55</td>
</tr>
<tr>
<td>Mining sustainability practices</td>
<td>12.5%</td>
<td>52.5%</td>
<td>25.0%</td>
<td>7.5%</td>
<td>2.5%</td>
<td>40</td>
<td>2.35</td>
</tr>
<tr>
<td>Health and safety on the mine site</td>
<td>17.9%</td>
<td>28.2%</td>
<td>30.8%</td>
<td>17.9%</td>
<td>5.1%</td>
<td>39</td>
<td>2.64</td>
</tr>
</tbody>
</table>
Figure 6.2b. Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th></th>
<th>Extremely High</th>
<th>High</th>
<th>Moderate</th>
<th>low</th>
<th>Extremely low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global mining market</td>
<td>13.6%</td>
<td>27.9%</td>
<td>33.1%</td>
<td>19.5%</td>
<td>5.9%</td>
<td>118</td>
<td>2.76</td>
</tr>
<tr>
<td>Understanding of the mining operations</td>
<td>19.5%</td>
<td>48.3%</td>
<td>20.3%</td>
<td>10.1%</td>
<td>1.7%</td>
<td>118</td>
<td>2.26</td>
</tr>
<tr>
<td>Understanding of the mining economy</td>
<td>20.1%</td>
<td>38.6%</td>
<td>28.6%</td>
<td>8.4%</td>
<td>4.2%</td>
<td>119</td>
<td>2.38</td>
</tr>
<tr>
<td>Environmental impact from mining industry</td>
<td>27.7%</td>
<td>39.5%</td>
<td>21.8%</td>
<td>6.7%</td>
<td>4.2%</td>
<td>119</td>
<td>2.20</td>
</tr>
<tr>
<td>Health concerns related to the mining operations</td>
<td>20.1%</td>
<td>36.1%</td>
<td>27.7%</td>
<td>11.7%</td>
<td>4.2%</td>
<td>119</td>
<td>2.44</td>
</tr>
<tr>
<td>Mining sustainability practices</td>
<td>21.8%</td>
<td>40.3%</td>
<td>24.3%</td>
<td>9.2%</td>
<td>4.2%</td>
<td>119</td>
<td>2.34</td>
</tr>
<tr>
<td>Health and safety on the mine site</td>
<td>15.1%</td>
<td>27.7%</td>
<td>39.5%</td>
<td>12.6%</td>
<td>5.0%</td>
<td>119</td>
<td>2.65</td>
</tr>
</tbody>
</table>
Figure 6.2c. Group 3 “Environmental community”.

<table>
<thead>
<tr>
<th></th>
<th>Extremely High</th>
<th>High</th>
<th>Moderate</th>
<th>low</th>
<th>Extremely low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global mining market</td>
<td>11.7%</td>
<td>20.6%</td>
<td>23.5%</td>
<td>29.4%</td>
<td>14.7%</td>
<td>34</td>
<td>3.15</td>
</tr>
<tr>
<td>Understanding of the mining operation and techniques</td>
<td>27.8%</td>
<td>30.6%</td>
<td>25.0%</td>
<td>8.3%</td>
<td>8.3%</td>
<td>36</td>
<td>2.39</td>
</tr>
<tr>
<td>Understanding of the mining economy</td>
<td>11.4%</td>
<td>31.4%</td>
<td>28.6%</td>
<td>17.1%</td>
<td>11.4%</td>
<td>35</td>
<td>2.86</td>
</tr>
<tr>
<td>Environmental impact from mining industry</td>
<td>64.8%</td>
<td>18.9%</td>
<td>10.8%</td>
<td>0.0%</td>
<td>5.4%</td>
<td>37</td>
<td>1.62</td>
</tr>
<tr>
<td>Health concerns relate to the mining operations</td>
<td>59.5%</td>
<td>21.6%</td>
<td>13.5%</td>
<td>2.7%</td>
<td>2.7%</td>
<td>37</td>
<td>1.68</td>
</tr>
<tr>
<td>Mining sustainability practices</td>
<td>50.0%</td>
<td>22.2%</td>
<td>16.7%</td>
<td>5.6%</td>
<td>5.6%</td>
<td>36</td>
<td>1.94</td>
</tr>
<tr>
<td>Health and safety on the mine site</td>
<td>36.1%</td>
<td>19.4%</td>
<td>13.9%</td>
<td>25.0%</td>
<td>5.6%</td>
<td>36</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Group 3 has a high interest in all of the topics, but the two topics of highest interest were “understanding of the mining economy” and “mining sustainability practices”. Group 2 has the same high level of interest to all of topics, and two primary
choices are the same as a Group 1. The “environmental community,” group 3 had the highest interest in environmental concerns, health effect and safety.

**Q6** In your opinion, who should provide or deliver the information regarding the specific mining operation near you? Please choose one that applies. See tables 6.5a, 6.5b, and 6.5c.

Table 6.5a. Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining company staff</td>
<td>67.5%</td>
</tr>
<tr>
<td>Academia, educations professionals</td>
<td>0.0%</td>
</tr>
<tr>
<td>Independent experts</td>
<td>15.0%</td>
</tr>
<tr>
<td>Environmental/NGO</td>
<td>0.0%</td>
</tr>
<tr>
<td>State or federal regulatory staff</td>
<td>17.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Table 6.5b. Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining company staff</td>
<td>60.0%</td>
</tr>
<tr>
<td>Academia, educations professionals</td>
<td>5.8%</td>
</tr>
<tr>
<td>Independent experts</td>
<td>15.8%</td>
</tr>
<tr>
<td>Environmental/NGO</td>
<td>2.5%</td>
</tr>
<tr>
<td>State or federal regulatory staff</td>
<td>15.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

Table 6.5c. Group 3 “Environmental community”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining company staff</td>
<td>5.8%</td>
</tr>
<tr>
<td>Academia, educations professionals</td>
<td>2.9%</td>
</tr>
<tr>
<td>Independent experts</td>
<td>52.9%</td>
</tr>
<tr>
<td>Environmental/NGO</td>
<td>11.7%</td>
</tr>
</tbody>
</table>
Inferences: This question shows that the level of trust between the local community and the mining community is high. For Group 1 “mining company staff” is a desired source to deliver the information, while the government has the second place. Group 2 has similar responses: he mining professionals and independent experts have a bigger level of trust. The Group 3 appears to trust just the independent experts and shows a very small percentage of trust for mining professionals.

Q7 Would you find it useful if a website containing information relevant to a specific mining operation was available and, if so, what information would you want it to contain? Please choose one answer per row. See figures 6.3a, 6.3b. 6.3c.

Figure 6.3a Group “Local residents”.
Figure 6.3b. Group 2 “Geologist network”.

Figure 6.3c. Group 3 “Environmental community”.
For the local community, Group 1, web sites with information about specific mine sites appears useful, and were interested in the question/answer choice, as well as updates of the status of the mine. The responses from the mining professionals group are similar to Group 1, while the environmental community, group 3, is interested in permits and mining status updates.

Q8 Would you find it helpful to have an opportunity to participate in an on-site inspection of a nearby mining operation or to have someone you trust represent you in such an inspection? Please choose one that applies. See tables 6.6a, 6.6b, 6.6c.

Table 6.6a. Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Important</td>
<td>7.5%</td>
</tr>
<tr>
<td>Important</td>
<td>42.5%</td>
</tr>
<tr>
<td>Not Important</td>
<td>37.5%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Table 6.6b. Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Important</td>
<td>21.5%</td>
</tr>
<tr>
<td>Important</td>
<td>41.3%</td>
</tr>
<tr>
<td>Not Important</td>
<td>32.2%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>4.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121</strong></td>
</tr>
</tbody>
</table>

Table 6.6c. Group 3 “Environmental community”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Important</td>
<td>60.0%</td>
</tr>
<tr>
<td>Important</td>
<td>31.4%</td>
</tr>
<tr>
<td>Not Important</td>
<td>2.8%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>
The local community appears to be less interested in participating in on-site mine inspections than either the geologist network or the environmental community. However, 91% of the environmental community indicated that they would like to participate in on-site inspections (important or extremely important) compared to 63% of the geological community. This response is generally consistent with other questions and supports the notion that the environmental community is least trusting of a mining operation.

Q9 Do you know who your immediate contact is in the case of an emergency related to the mining operation near you? Please choose one that applies.

The local community will contact mining company representatives in case of an emergency. However, 27% of the population do not know who they will contact. Group 2 has the similar choices as well as state government option (23%), and the environmental community has 55% response of not knowing who they will contact.

Q10 In your opinion, what is the most important aspect of general community development within your community? Please choose one answer per row. See figures 6.4a, 6.4b, 6.4c.

Figure 6.4a. Group 1 “Local residents”.
Figure 6.4b. Group 2 “Geologist network”.

Figure 6.4c. Group 3 “Environmental community”.

The local economy and job availability are the priorities for the local community,
and environmental safety and support for education are in second place. For the mining professionals, jobs and the local economy are also important, with environmental safety and local infrastructure in second place. The environmental community is more concentrated on “environmental safety and sustainability” (79%), and education support is also strong (46%), although not as strong as for the other two groups.

Q11 Have you ever participated in a decision-making process regarding the development of the nearby mining operation?

Inferences: The most representative from local community never participate in the decision-making process (max 91%); the half of mining professionals response “yes” on this question, and an environmental community representatives (77%) participated in decision-making process.

Q12 How important for community sustainability is the protection and conservation of the following: Please choose only one answer per row. See figures 6.5a, 6.5b, 6.5c.

Figure 6.5a. Group 1 “Local residents”.
For the first and second groups the most important goal was for economic development for the Indigenous community, while for the third group, indigenous spirit sites and culture are more important. These responses reflect differing views of the
indigenous community that are rather striking, and perhaps deserve additional study. Unfortunately, this study was unable to gather sufficient members of the indigenous community in the area to obtain their views.

For questions 13-16, the figures were not included, and only brief comments are presented below on the responses.

**Q13** If given an opportunity, would you be interested in participating in a dialog with mining company representatives regarding a specific mine, recognizing that it takes a commitment of time? Please choose one that applies.

Inferences: The local community and mining professionals groups has a similar high (22%) to moderate (11%) enthusiasm and availability to participating in a dialog with mining company and spend some time for it, when the environmental community has the 44% from all participants who are extremely interested and are ready to spend some time for the productive dialog.

**Q14** How often, if ever, would you like the mining company near you to provide you with updates on its ongoing mining operation (via email, mail, or other means distant type of communication)? Please choose one that applies.

Inferences: The results from this question shows that the environmental community would like to be more involved in the mining development process and received the information more often, compare to the local community group and mining professionals groups.

**Q15** If you had an opportunity to participate in a direct dialog with the nearby mining company, which questions and issues you would find most important: Please choose one answer per row.

Inferences: For the local community two questions are more important for the discussions with mining company: employment opportunities and educational opportunity for the community. For the Groups 1&2 together the open forum and hire independent experts for consultation made the second priority. For the environmental community results are different: the more responses received the “hire independent experts for consultation”, “negotiate the post – closure plans”, and “permit the regular
citizen site inspections and sampling”.

Q16 Do you believe that the mining company near you complies with relevant federal and state environmental regulations? Please choose one that applies.

Inferences: The question shows the level of trust to the mining companies, when the local community and mining professionals believes that mining company complies with relevant federal and state environmental regulations always and most of the time, for the environmental community the answer “sometimes” chooses the 54% of participants.

Q17. What is the level of your concern related to environmental impacts/issues from the mining industry for the next categories: Please choose one answer per row. See tables 6.7a, 6.7b, and 6.7c.

<table>
<thead>
<tr>
<th>Table 6.7a. Group 1 “Local residents”.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Air Pollution (e.g. dust vehicle emissions, chemical release)</td>
</tr>
<tr>
<td>33.3%</td>
</tr>
<tr>
<td>Information about air and water permits and standards</td>
</tr>
<tr>
<td>Acid rock drainage</td>
</tr>
<tr>
<td>Pit – lakes formation after mine closure</td>
</tr>
<tr>
<td>Impacts on aquatic and terrestrial wildlife</td>
</tr>
<tr>
<td>Impact on the recreational areas</td>
</tr>
<tr>
<td>Visual impacts</td>
</tr>
<tr>
<td>Noise and increased truck traffic</td>
</tr>
</tbody>
</table>
Table 6.7b. Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th></th>
<th>Extremely Important</th>
<th>Important</th>
<th>Moderate</th>
<th>Low</th>
<th>Extremely low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Pollution (e.g. dust vehicle emissions, chemical release)</td>
<td>16.9%</td>
<td>44.1%</td>
<td>14.4%</td>
<td>20.3%</td>
<td>4.2%</td>
<td>118</td>
<td>2.51</td>
</tr>
<tr>
<td>Information about air and water permits and standards</td>
<td>12.6%</td>
<td>36.1%</td>
<td>26.1%</td>
<td>18.4%</td>
<td>6.7%</td>
<td>119</td>
<td>2.71</td>
</tr>
<tr>
<td>Acid rock drainage</td>
<td>16.8%</td>
<td>33.6%</td>
<td>27.7%</td>
<td>16.8%</td>
<td>5.1%</td>
<td>119</td>
<td>2.60</td>
</tr>
<tr>
<td>Pit – lakes formation after mine closure</td>
<td>12.8%</td>
<td>29.1%</td>
<td>25.6%</td>
<td>20.5%</td>
<td>11.9%</td>
<td>117</td>
<td>2.90</td>
</tr>
<tr>
<td>Impacts on aquatic and terrestrial wildlife</td>
<td>17.8%</td>
<td>35.6%</td>
<td>24.7%</td>
<td>14.4%</td>
<td>7.6%</td>
<td>118</td>
<td>2.58</td>
</tr>
<tr>
<td>Impact on the recreational areas</td>
<td>9.4%</td>
<td>28.2%</td>
<td>25.6%</td>
<td>24.7%</td>
<td>11.9%</td>
<td>117</td>
<td>3.02</td>
</tr>
<tr>
<td>Visual impacts</td>
<td>7.6%</td>
<td>19.3%</td>
<td>24.4%</td>
<td>28.6%</td>
<td>20.1%</td>
<td>119</td>
<td>3.34</td>
</tr>
<tr>
<td>Noise and increased truck traffic</td>
<td>5.8%</td>
<td>27.7%</td>
<td>33.6%</td>
<td>22.7%</td>
<td>10.1%</td>
<td>119</td>
<td>3.03</td>
</tr>
</tbody>
</table>

Table 6.7c. Group 3 “Environmental community”.

<table>
<thead>
<tr>
<th></th>
<th>Extremely Important</th>
<th>Important</th>
<th>Moderate</th>
<th>Low</th>
<th>Extremely low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Pollution (e.g. dust vehicle emissions, chemical release)</td>
<td>57.1%</td>
<td>22.8%</td>
<td>17.1%</td>
<td>2.8%</td>
<td>0.0%</td>
<td>35</td>
<td>1.66</td>
</tr>
<tr>
<td>Information about air and water permits and standards</td>
<td>66.7%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>33</td>
<td>1.33</td>
</tr>
<tr>
<td>Acid rock drainage</td>
<td>73.5%</td>
<td>23.5%</td>
<td>0.0%</td>
<td>2.9%</td>
<td>0.0%</td>
<td>34</td>
<td>1.32</td>
</tr>
<tr>
<td>Pit – lakes formation after mine closure</td>
<td>64.7%</td>
<td>20.6%</td>
<td>11.8%</td>
<td>2.9%</td>
<td>0.0%</td>
<td>34</td>
<td>1.53</td>
</tr>
<tr>
<td>Impacts on aquatic and terrestrial wildlife</td>
<td>88.2%</td>
<td>11.8%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>34</td>
<td>1.12</td>
</tr>
<tr>
<td>Impact on the recreational areas</td>
<td>44.1%</td>
<td>29.4%</td>
<td>17.6%</td>
<td>5.9%</td>
<td>2.9%</td>
<td>34</td>
<td>1.94</td>
</tr>
</tbody>
</table>
Visual impacts  | 44.1%  | 32.3%  | 20.6%  | 2.9%  | 0.0%  | 34  | 1.82
Noise and increased truck traffic  | 47.1%  | 35.3%  | 17.6%  | 0.0%  | 0.0%  | 34  | 1.71

For the local community the top three environmental concerns are: air pollution, impacts on aquatic and terrestrial wildlife, and impact on recreational areas. For the mining professionals (Group 2): air pollution, impacts on aquatic and terrestrial wildlife, and the pit lake formation are important. The environmental community shows more concern about all impacts- most responses chose ‘extremely important” and the top three concerns are: impacts on aquatic and terrestrial wildlife, acid rock drainage, and information about air and water permits and standards.

Q18 What is the level of importance of the following mining post-closure issues? Please choose one answer per row. See tables 6.8a, 6.8b, and 6.8c.

Table 6.8a. Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Extremely Important</th>
<th>Important</th>
<th>Moderate</th>
<th>Low</th>
<th>Extremely low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time frame for mine closure</td>
<td>5.1%</td>
<td>48.7%</td>
<td>38.5%</td>
<td>7.7%</td>
<td>0.0%</td>
<td>39</td>
<td>2.49</td>
</tr>
<tr>
<td>Surface reclamation plans</td>
<td>17.9%</td>
<td>58.9%</td>
<td>17.9%</td>
<td>5.1%</td>
<td>0.0%</td>
<td>39</td>
<td>2.10</td>
</tr>
<tr>
<td>Access to public/private lands associated with the mine following closure</td>
<td>28.2%</td>
<td>41.1%</td>
<td>15.4%</td>
<td>15.4%</td>
<td>0.0%</td>
<td>39</td>
<td>2.18</td>
</tr>
<tr>
<td>Decisions on productive post mining land uses</td>
<td>28.2%</td>
<td>35.9%</td>
<td>28.2%</td>
<td>5.1%</td>
<td>2.6%</td>
<td>39</td>
<td>2.18</td>
</tr>
<tr>
<td>Long-term water or land remediation/management requirements</td>
<td>41.1%</td>
<td>38.5%</td>
<td>15.4%</td>
<td>5.1%</td>
<td>0.0%</td>
<td>39</td>
<td>1.85</td>
</tr>
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</table>

Table 6.8b. Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Extremely Important</th>
<th>Important</th>
<th>Moderate</th>
<th>Low</th>
<th>Extremely low</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time frame for mine closure</td>
<td>9.2%</td>
<td>45.4%</td>
<td>30.3%</td>
<td>10.9%</td>
<td>4.2%</td>
<td>39</td>
<td>2.55</td>
</tr>
</tbody>
</table>
The major differences are focused on Group 3 “environmental community”, where the response “extremely important” is more common, with the “long-term water or land remediation/management requirements” and “surface reclamation plans” as a top two priorities for the mining post-closure issues.

Q19 In your opinion which of the following is the most important economic benefit of the mining company? Please choose one that applies. See Tables 6.9a, 6.9b, 6.9c.
Table 6.9a. Group 1 “Local residents”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of supply services</td>
<td>5.1%</td>
</tr>
<tr>
<td>Professional job opportunities</td>
<td>53.9%</td>
</tr>
<tr>
<td>Development of the recreational areas</td>
<td>2.6%</td>
</tr>
<tr>
<td>Education support</td>
<td>12.8%</td>
</tr>
<tr>
<td>Infrastructure and transportation</td>
<td>7.7%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>17.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
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Table 6.9b. Group 2 “Geologist network”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of supply services</td>
<td>8.5%</td>
</tr>
<tr>
<td>Professional job opportunities</td>
<td>60.1%</td>
</tr>
<tr>
<td>Development of the recreational areas</td>
<td>0.9%</td>
</tr>
<tr>
<td>Education support</td>
<td>6.8%</td>
</tr>
<tr>
<td>Infrastructure and transportation</td>
<td>11.9%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>11.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
</tr>
</tbody>
</table>

Table 6.9c Group 3 “Environmental community”.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of supply services</td>
<td>3.0%</td>
</tr>
<tr>
<td>Professional job opportunities</td>
<td>30.3%</td>
</tr>
<tr>
<td>Development of the recreational areas</td>
<td>0.0%</td>
</tr>
<tr>
<td>Education support</td>
<td>9.1%</td>
</tr>
<tr>
<td>Infrastructure and transportation</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>57.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
All three groups had similar and positive opinions about the important economic benefits from a mining company, particularly “professional job opportunities” and “education support”. However, the additional comments from the geologists and the environmental NGO group were distinctly different, and perhaps indicate why discussions between the two groups remains a challenge.

**Additional Comments**

Q20 Please list any additional comments you would like to share here (the punctuation and the grammar are original):

Additional comments from Group 1 “Local residents”.

- I have a good paying professional job because of the mining industry. I am the Sales Mgr for a company that does business with the mining industry and see firsthand the many benefits of mining. Much preferable to life without mining!

- Production of metals, employment, and generation of wealth for the citizenry is the most important economic benefit of the mining;

- See BLM Planning NEPA Register web sites for opportunities to provide public comments;

- Providing non-renewable resources to meet the needs of national, state, and local interests

- The best paying jobs in my community are provided by the mining industry. The larger mining companies also provide the best health care;

- The mining industry in Northern Nevada has done an excellent job of community building and stewardship in my opinion;

- Stability in all the above most important economic benefit of the mining;

- In my perspective the mining companies will do what is best for their profit margin, which is required of them by law in most cases. Violations of environmental or other safeguarding regulations will impact their bottom line, so they abide and represent themselves as good corporate "citizen". They are, as I have seen, willing to take short cuts and lobby to undermine environmental regulations that will negatively affect their profits. Therefore, in general, I do not trust well stated intentions, but this does not mean that I think there is no point in dialogue. Perhaps, the dynamic can change, but for dialogue with communities to be meaningful, the communities must have the ability leverage their position;
- Development of the recreational areas is the most important economic benefit of the mining;

- Overall economic development of the community and its impact on the local city and educational opportunities.

Additional comments from Group 2 “Geologist network”:

- I sense a lack of recognition of a company's right or an individual's right to engage in economic production without interference from those who just object to essential mineral production because they ignorantly perceive it as unnecessary;

- This survey needs a respondent profile section in order for the surveyors to have a reference frame for qualifying the interpretations of the responses;

- Providing basic materials for the world, plus local job opportunities both 'professional' and nonprofessional local economic development is the most important economic benefit of the mining;

- Sorry, but this feels like a “have you stopped beating your wife” Answer yes or no survey Mining use on public and/or private ground should be a contract negotiated prior to opening the mine. The close surrounding community should be consulted prior to development and their concerns given greater weight than interests from distance. The process is fairly well spelled out by the permitting process. The problem seems to be after the permitting process when the decision doesn't satisfy some groups. The current suits against BLM for their fracking decision is a good example;

- All are important contributions but none are the most important. The most important economic benefits are employment, community development and sustainability and protection of the environment;

- based on the questioning so far in all of the component parts of this survey I would not find it difficult to believe you have never visited or spent any amount of time around a mine or spoken at any length with folks who work for a mine, live in a mining community or a mining company. Your questions are too broad and general, not well enough defined to provide informative answers, subject to widely varying interpretation, lack insight to the problems, issues and solutions of the modern mining in today’s culture;

- This is a biased survey that assumes an unwarranted level of distrust of mining companies and mining professionals;

- Providing good paying jobs, contributing to the federal, state and county tax rolls, and mining in a safe and environmentally responsible manner is the most important economic benefit of the mining;

- In an unregulated environment I would answer differently. Your survey
will have limited usefulness unless it truly is random instead of being publicized to specific groups and only self-selected individuals like me respond;

- All mining activities should be developed and operated with transparent good-faith cooperation between the companies, employees, community, interest groups, government. There should be a concerted effort to realize best practices. Conflict and legal entanglement only disserve the community;

- These questions are generally one sided and do not really touch on the social contribution that a mine supplies in the form of resource for usage in a modern, functioning society;

- I am a professional working in the mining/exploration industry. As with any survey the questions are often too general and do not go into enough detail. Most individuals are ignorant regarding mining law and regulation and have been fed distortions regarding the industry by various groups and outlets. As with all industries, environmental groups, and political organizations there are both good and bad aspects to their activities. Open honest discussion regarding benefits and impacts are always best - but getting open honest discussion and information is often hard to get;

- This survey mistakenly seems to assume that 'average citizens' are qualified to have technical opinions, a point of view I strongly disagree with;

- FYI - all mining related permits are already available to the public, either at State or Federal agencies therefore, they do not need to also be posted on another web site. All permits are 100% disclosed to the public;

- I think honesty from all parties and the removal of PR agents would go very far in creating a trusting relationship between private citizens and corporations/environmental groups;

- Obama has a "war against jobs" when it comes to mining. The EPA, BLM, and environmentalists are against all job creation on public lands in rural Nevada. The policy of "multiple use" is being quickly terminated;

- Lake formation might be a good added value if the water quality is good and it might be developed for recreation (fishing, etc.). Also, the mine infrastructure might be of value for future land development (wells, pits, buildings, energy power, etc., for what the local community might be able to use, etc.;

- I am an exploration geologist with 40 yrs of experience and worked for 2 yrs as a open pit mine geologist mapping the geological features (rock type, faults, veins, ore minerals) in the 40 foot tall pit walls on the benches of a +500 foot deep copper mine. Many of your questions seem naive. It would be instructive if you would visit a mining operation.

Your questions imply the public has a right to inspect mining operation as if they were different than any other legitimate business. Do you believe the public or
activists have the right to inspect and have updates in regard to manufacturing plants, business' offices, water plants sewage plants, airports repair shops, salvage yards (auto and scrap), etc. or your house/apt.?

Most mines are not immediately adjacent to towns or cities unlike the operation at Silver City near Virginia City or at Eureka, NV. Most mines are over an hour bus ride away from where the workers live.

Re: Q 2: Mine operators are at their operations all the time. Federal and State Regulators inspect mines, often unannounced. All the other selections are not trustworthy at all.

Re: Q5 & 7 Being in the mining industry these questions are not relevant to me.

RE: Q8: Federal regulation requires that you have an initial 3 days of mine safety training and a yearly 8 hr refresher course before you can go on a mine property, twice that for being on an underground mine property.

I also find it arrogant that you believe that businesses can be inspected by the general public.

Re: Q12 This is a good neighbor policy. Indigenous culture is difficult to preserve and do these people really want to preserve their culture, or do they not know of another way to live. Is it right that Western People keep these indigenous people as if in a zoo? Economic development come from tax revenue and income to locals.

RE Q15 Last question refer to comment for Q8, tax revenue and local income will provide infrastructure, or if a remote/un-developed country (lack of infrastructure) it will come with the mine.

RE Q16: Workers are human therefore Always is impossible, but management strives for this.

Re Q17 These questions are taken into account in the EIS and permitting process.

Re Q18 Row 3: The public has NO access Right to Private Land before or after mining!! Public land can be accessed around reclaimed mine sites, which when operation are often fenced off to prevent trespass and for safety of the workers and the public. Again your lack of exposure to a mining operation shows-Would a reasonable person want to "visit" a 1000 foot deep hole with 45 degree unstable slopes and a pit lake, fresh or polluted at the bottom?

Row 4 The BLM/USFS determines the post closure use on Federal lands, which now demands removal of all surface facilities, including electrical connection. The high power requirements of mines require high voltage connection to The Grid. Extensive, flat tailing ponds would be for excellent solar voltaic power arrays as would the proper aspect of slopes on mine dumps if the powers lines were kept in place.

RE: Q19 Tax revenue and local income derived from a mining operation provide for all of these selections;
- This survey seems to neglect or downplay the foremost purpose for developing & operating a mine: to have an economically profitable operation, while also providing employment, community benefits, educational support, etc.

Additional comments from Group 3 ‘Environmental community’:

- should the second one instead be: compliance with air and water permits and standards?? - wasn't sure how to answer that. The level of concern about information is low, but the level of concern about compliance with permits is high;
- long-term environmental compliance;
- mines have a poor benefit to the surrounding community with the dangers it creates. It creates pollution and water tainting;
- supply of globally necessary minerals -- would like to see them advance into "mineral supply" through recycling, re-mining, mining landfills, etc Beyond just modern mining;
- There is no significant benefit, but a high risk of environmental pollution;
- Benefits disappear as soon as mine busts;
- I do not feel than there is one;
- I see no benefit for the residents of this community. The company and investors make money while destroying our ground water, view and roads;
- Long-term monitoring plan and adequate bonding to address post-closure problems should be included here;
- Mining provides less than 1% of the U.S. work force. It no longer provides enough economic benefit to justify the environmental and socioeconomic impacts;
- Reclaiming previous legacy issues;
- I believe that the net economic benefit (when considering the value of ecosystem services) is negative.
- Focus on mining/money/politics/uninterested public. Money to be made in protracted lawsuits and in protracted "protests" Follow the money. Integrity is dead. Who cares?;
- Mining laws need to be changed/updated;
- I've been active in the development and implementation of the Stillwater GNA. I appreciate your interest in this challenging alternative to litigation. I'll be curious to hear the results of this survey;
- Need for safety over profit Agencies that can say "no". If mine company is going to eliminate alternative mitigation because of cost, they need to disclose finances;
there has never been a clean mine. Mines have mostly benefited from the privatization of income and the socialization of pollution;

Would have been good to ask whether people feel mining companies should pay communities to have their own independent experts - that would work for them rather than the mine;

I found this survey to be informative, and am currently working on a paper regarding the proposed Bearlodge REE in Wyoming. I had the chance to conduct a survey for that, though with a different method /framework that focuses on future impacts, recreation access, and the EIS process;

This survey questions are very much from an industry perspective. It would have been better to involve others in developing the survey;

I have found dealing with the specific Canadian Mining company working in our area that the story changes to fit their needs and the ADEQ has no teeth to do anything. The main issue is that the 1872 mining law for Arizona desperately needs to be rewritten to today's standards and water usage regulations. We are getting very close to Calif. water drought issues here. Thank You;

I have no positive words for a company that will come into a community and create the health environment issues that have proven themselves over the years. It destroys the water, land and air. How proud can we be positive with the past results?;

1. Yes I generally know where I should be able to find information on state and federal permit and regulatory information, but no it is not always easy to find and sometimes is not available at all. 2. Trust in mining company information on mining operations? Yes if it's from a SEDAR report, otherwise, not so much. Government/Regulators on mining operations? Yes if it is material written into a permit, otherwise not so much. 6. Who should provide information on a mine near you? Unfair to have to choose one. I might want any of the folks listed to provide information to me, depending on what I am looking for;

The proposed operation is an inside copper mine in an unprotected aquifer. Though it's unprecedented for copper, in situ uranium mining in unprotected aquifers have all resulted in reduced water quality/pollution of the aquifer. This aquifer is the only clean water source for multiple communities;

Land Impact and the community should come first;

I do not believe the in-situ mine wanting to develop in my community can operate without depleting and polluting the aquifer where my water comes from. Would you like to drink ground water contaminated by acid? This mine will poison and deplete our water;

Question #12 seems to overlook anyone but indigenous peoples. Why are the cultural issues and sites that are important to anglo and latino peoples
overlooked, when they far outnumber indigenous peoples? You're also overlooking the fact that most mining companies cannot afford and/or do not want to engage in an intensive dialog with communities. Smaller mining companies and juniors are simply unwilling to pay out what it takes, yet they are the industry's biggest problem-creators. Also, this research project is funded by Newmont. It will never be valid. Academics at the major universities of the West are funded by industry and are not valid sources of information or support for affected communities. The research that comes from these institutions is simply not trustworthy most of the time because it is not independent;

- You have interviewed the members of the SMC GNA and I believe that periodic re-interviews by you would be valuable as a reality check. Also, a general seminar on mines followed up by mine specific seminar.

6.2 Conclusion

The demographic information from all groups of the survey participants shows that the major amount of responses were received from the middle age group (45 – 65 years old). Half of the participants from the local community work or have family members who work for the mining industry.

The answer “I am primarily concerned about the social and environmental impacts of mining” was chosen by 18 % of the Group 2 “Geological network” and 73% for the “environmental community” (Group 3). For the highest education level, the major answer for the local community is the undergraduate degree, while for the Groups 2 and 3 it is a graduate level degree. The gender questions show that for the first two groups more responses were received from men and for the Group 3, the gender responses were close to equal. The survey is rather clear in a major opinion gap between the mining professionals and the environmental community— they clearly do not trust each other. The local community has a reasonably good level of trust towards the mining companies and mining professionals. The local people appear ready for the dialog and long-term relationships with the mining companies; they are interested in knowing more about the mining economy and general mining development. People do not expect many benefits from mining, and providing job placement and education support for the children are major benefits expected from the mining companies. People are interested in having community meetings with the miners, and would like to receive information updates two
times per year. Community and professionals are interested in the internet-based page related to the mine near them; however, the level of interest for on-site inspection is low for both groups (Group 1 and Group 2). The main environmental concern for the Groups 1 and 2 is air pollution and effect on the aquatic ecosystems. The responses from first two groups are similar, or have the tendency to similarity. The big differences is in answers for Group 3, where the participants are more focused on the environmental issues instead of the economic benefits. The environmental community also showed the highest level of interest in the legal issues associated with mining, such as permitting, post-closure regulations, and, air and water sampling. The environmental community shows the strongest interest in mine inspections, and in community sampling. They would also like to receive information updates more often and are ready to spend time and effort to be more involved in the decision-making process related to the mine operation.

The additional comments show that environmental community priority is not primarily the economic benefits or jobs (just 5% from the group works for or has a relative working for the mining related industry) or infrastructure development. The answers related to the indigenous community also show that this group is focused on the environmental issues rather than economic conditions in the region.

Additional comments from Group 1 “local community” show that the mining companies provide good work places and health care for the residents, even though there were some negative responses, people are open to the dialog and would like to have a long term stability of the Nevada mining industry.

The comments from Group 2 “Geological network” are sometimes negative regarding the survey. Many questions from this group indicated that they thought the questions were “one-sided”. The situation increased the current crisis in the job market for the mining professionals. However, the extended comments from this group indicated support for the notion of mining as one of the primary industries in Nevada, and their ability and readiness to be included in the dialog between the mine industry, local residents, and the environmental NGOs. The results of this survey also reinforce the requirement of defining the list of stakeholders in a manner that is complete. The mining industry has strong support and forms the economic basis for the Northern Nevada
communities. The impacts are mostly localized, in part due to an arid climate, and conflicts related to agricultural and other land uses are minimized, except perhaps for Humboldt River water. This lower level of conflict is likely not the case in areas where existing communities will be more affected by water usage, water contamination and associated impacts on the fisheries, recreation resources, and agriculture. Once mining becomes a dominant part of the local economy, support for mining is likely to increase, although not always. Many of the controversial mining projects also involve environmental NGO’s that can nationalize the issues, and effect how projects are perceived. Indeed, permitting of mines in the U.S. and Canada where issues arise from larger concerns include public participation processes. For the Emigrant Mine, in particular, conflicts arose during the early permitting process that involved environmental NGO’s, the Bureau of Land Management and the U.S. Environmental Protection Agency.

So, what does this survey indicate regarding the utility of a GNA for mines in northern Nevada and the Emigrant Basin Mine. Because the northern Nevada economy is strongly based on mining, there is clearly no groundswell of opposition or a widespread concern about mining, with some localized exceptions. The previous concerns about acid drainage at the Emigrant Mine have so far not been realized, which were the basis for the permitting delays in the early 2000’s. The survey of the environmental community was based on a widespread group of activists in the western U.S. and Canada, and no local or statewide environmental NGO’s have expressed current concerns about the Emigrant Mine. Thus, the reasons for undergoing the effort for the development of a GNA for the Emigrant mine appear to not exist at the present time. This may not always be the case for mines in Nevada, and a local group of opponents will likely need to emerge prior to beginning the effort for GNA development.
Chapter 7.
Indigenous people and mining operations in Nevada, USA.

Good Neighbor Agreements with indigenous communities should address economic, environmental and social goals, with a specific attention to the local traditions. The indigenous community will most often require separate discussions and agreements from other groups of stakeholders. The reason for this separation is based on their deep ancient and cultural attachment to the land, where mining occurs or has an impact. (MMSD, 2002). Different countries have treated indigenous people differently, and in Canada, for example, the 2014 Canadian Supreme Court ruling of a case involving the Tsilhqot’in nation agreed that aboriginal title of lands had to be considered during discussions on mine approval, which is not the case for non-reservation land in the U.S. Indigenous communities often have special needs, they are likely poorest and have a distinct relations with political institutions in the state level. Moreover, indigenous people associate themselves with the land and natural resources of the territory where they are living. Sustainable development for the indigenous community should be based on the respective specific needs. For example those agreements may focus on support and protection of spiritual and cultural traditions or socio-economic development of housing, health care and education.

For indigenous and aboriginal communities, a GNA is more commonly called an Impact and Benefit Agreement (IBA) and often associated with Canadian mining operations (including Oil Sands projects). These agreements are increasingly common and are often a final, legally binding agreement that stems from a memorandum of understanding and developed through a consultative process with the affected aboriginal communities. While environmental aspects are commonly considered, they are generally focused on labor, economic development, cultural, financial and commercial provisions that will allow those communities to receive capacity building tools for sustainable development. For a useful description of these agreements, see http://www.miningfacts.org/Communities/What-are-Impact-and-Benefit-Agreements-(IBAs)/.
For Nevada, conflicts between Western Shoshone bands and mining companies are common. Many of these bands have, over the past several years, been unwilling to support mining projects, and have actively opposed certain mines.

7.1 Introduction to the Western Shoshone Indian tribe.

Historically, the Te-Moak Tribe of Western Shoshone Indians (picture 9) lived primarily within the borders of what is now, Nevada. Currently, the South Fork Reservation covers approximately 13,050 acres of arid lands in northeast Nevada, and is located 28 miles from the city of Elko, near the Humboldt Toiyabe National Forest and Ruby Mountains. (http://www.temoaktribe.com/ Date of access February 2015) The total population of the Te-Moak tribe is 2096 people. See picture 7.1, figure 7.1, and map 7.1. According to the tribes’ official web–page:

“The Te-Moak Tribe of Western Shoshone Indians of Nevada is a coalition government with headquarters in Elko, Nevada, serving four distinct Shoshone colonies in Nevada: Battle Mountain Colony, Elko Colony, South Fork Colony, and Wells Colony. The Te-Moak Tribal Council has total jurisdiction over all tribal lands, though the colonies retain sovereignty over all the other affairs, and each has its own separate governing council”. (Retrieved March 1, 2015 from http://www.temoaktribe.com/).

The tribes’ budget has two significant sources: government contracts and ranching. Western Shoshone name themselves “Newe” which means “The People”. Historically the tribe lives on the land that currently covers Idaho, Nevada, Utah and the Death Valley region of southern California. Their land includes various landscapes that support hunting, grazing and gardening as a life-style. The first contact with caucasians was in 1827, and was followed by the beginning of social conflicts. One of the reasons for the conflict:

“White emigrants began rushing at this time to the gold mines of California, and many settled throughout the Newe region, claiming the most fertile lands” (Retrieved March 1, 2015 from http://www.temoaktribe.com).

Figure 7.1 Te–Moak Indian reservation location. Retrieved March 1, 2015 from http://www.temoaktribe.com/.
In 1863, the government agreed to pay $26 million in compensation, but natural resource conflicts continued into the next two centuries.

The Preamble of the Tribe’s Constitution:

“We, the Western Shoshone Indians of Nevada, located at Elko, Battle Mountain and South Fork; in order to improve the governing structure initially established by the Constitution and Bylaws adopted by the adult Indians residing on the reservation at Elko, Nevada, on May 3, 1938, pursuant to the Indian Reorganization Act of 1934 (48 Stat. 984), and approved on August 24, 1938; to provide an opportunity for other Te-Moak Communities of Western Shoshone Indians of Nevada to become part of this Tribe; to conserve our Tribal property; to develop our resources; to administer justice; to promote the welfare of ourselves and our descendants, and to otherwise govern the affairs of this Tribe, do ordain and establish this Constitution pursuant to the Indian Reorganization Act of 1934, as amended” (http://www.temoaktribe.com/. Date of access March,
7.2 Mining social responsibility and Western Shoshone.

A long-term conflict between the Shoshone Indian tribe and Barrick Mining Company’s expansion of the Cortez Gold mine (Cortez Hills) has been particularly difficult. The mine expansion is located on land that has historic and cultural value for the tribe.

“the area is "well-known for its spiritual and cultural importance to the Western Shoshone" and "home to local Shoshone creation stories, spirit life, medicinal, food and ceremonial plants and items" which "continues to be used to this day by Shoshone for spiritual and cultural practices" (Wolf, 2008).

Table 7.1 provides detailed information about the conflict. According to the Environmental Justice Atlas:

“The plaintiffs asked the court to revoke the mining permit issued to Barrick Gold by BLM on 12 November 2008. The initial claim was filed exclusively against BLM, but Barrick Gold voluntarily joined the litigation as defendant-intervener. The plaintiffs argue that the Project will cause permanent and irreparable harm to the environment, Mt. Tenabo and the Western Shoshone. They allege that the Project will substantially harm their right to engage in prayer and religious activities in the area. With regard to environmental damage, plaintiffs claim that the Project will dump toxic mine waste onto their land, and they further claim that the amount of groundwater needed by the mine will cause a loss of surface waters and springs in the area” (Environmental Justice Atlas. Retrieved April 18, 2015 from https://ejatlas.org ).

Table 7.1. The tension related to the Barrick’s Cortez mine.

<table>
<thead>
<tr>
<th>Name</th>
<th>Western Shoshone tribes vs. Barrick Gold lawsuit, USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy of Location</td>
<td>HIGH local level</td>
</tr>
<tr>
<td>Type of Conflict (1st level)</td>
<td>Mineral Ores and Building Materials Extraction</td>
</tr>
<tr>
<td>Type of Conflict (2nd level)</td>
<td>Mineral ore exploration</td>
</tr>
<tr>
<td></td>
<td>Mineral processing</td>
</tr>
</tbody>
</table>
Commodity	Gold

Intensity of Conflict	HIGH (widespread, mass mobilization, violence, arrests, etc...)

When did the Mobilization Begin	In REACTION to the implementation (during construction or operation)

Groups Mobilizing	Indigenous groups or traditional communities

Forms of Mobilization	Lawsuits, court cases, judicial activism

Environmental Impacts	Visible: Surface water pollution / Decreasing water quality (physico-chemical, biological)

Socio-economic Impacts	Visible: Loss of traditional knowledge, practices and culture

Project Status	In operation

Pathways for Conflict Outcome	Under negotiation. In October 2011 lawyers for Barrick Gold and lawyers for the Bureau of Land Management asked the judge presiding over the case to lift the partial injunction. The court agreed to lift the injunction in January 2012 finding that Barrick Gold had corrected the deficiencies in its environmental assessment. The lawyers for tribes are considering an appeal.

In discussions with Larson Bill, vice-chairman of the South Fork Band Council, which took place in Elko, NV on January 2014 (picture 7.2), he mentioned that the issues started from the very beginning, when the Barrick put up a sign “Welcome to the Barrick country!” on the major NV highway 80 near Winnemucca, NV.

Picture 7.2. Meeting with Western Shoshone, 2014.
The South Fork Band Council worked on the “Mining Corporate Policy on Operations Native American Lands” that was primarily developed by the tribe’s lawyer Julie Cavanaugh-Bill. The original draft of the Shoshoni Indian tribe corporate policy is located in Appendix 6.

The Draft “Mining Corporate Policy…” based on the (L.A.W.S.) concept, where L is land, A is air, W is water, and S is sun/spirit. Under this concept, all phases of mining companies’ activities must respect a spiritual, historical, linguistic, health and cultural interconnection of indigenous peoples and their traditional territories. Under the Draft

"...indigenous community has a right of the affected indigenous community to say no to a project that would threaten areas of cultural and spiritual significance” (Draft “Mining Corporate Policy”).

The signed Draft also provided the opportunity to the indigenous community to establish indigenous advisory committees (chosen freely by the communities themselves) to discuss issues of concern, share information, and include the communities in decision-making on water, land, air and other key issues. Mining companies, which operate near or on the traditional tribe territories should provide to the community the development of business opportunities, including joint venture work, implement a youth scholarship program will provide cross-cultural training programs for Native American and non-Native employees.

The Draft “Mining Corporate Policy is an example of indigenous people’s concerns related to the environmental and social impacts from mining. However, the response from the mining companies in Nevada was not generally supportive, since it was developed in the absence of their input.

On March 9, 2015 we discussed indigenous issues with Tim Buchanan, Director of the Corporate Social Responsibility of the Barrick Gold Corporation, North America Division. Barrick has several large mines in Nevada, including Goldstike, Cortez, Ruby Hills, Bald Mountain, Turquoise Ridge and an interest in Round Mountain Joint Venture. Most of the Barrick properties are located on lands claimed by Western Shoshones.
During the meeting we discussed the current Barrick strategy to minimize the conflict with Western Shoshone.

Mr. Buchanan has extensive experience with indigenous communities and listed issues and concerns that are applicable for any extraction company that has facilities that generate conflicts with indigenous people. Including the following:

- Stakeholder engagement is a useful method to reduce the risk of potential conflicts, because by using the agreement, the indigenous community is less likely to resort to regulatory, media or legal remedies.
- Social responsibility strategies must be based on human rights.
- The specialist who works with the diverse indigenous community needs to understand and truly respect the culture concerns and “spirit” of the community.
- The best time for the community meetings is the evening. The company must provide a comfortable space, transportation, safety and even refreshments for the people who attend the meeting.
- The company should control contract employees that work intermittently and are not familiar with traditions, and do not participate in the community life. Contractors, especially drillers, don’t have to be a “face of the company”!
- The company should know the local private property borders, local land regulations and people’s concerns related to the land which the mining company is going to use, or the land located nearest the mine as well as the people who use this land.
- Control community expectations, educate the community about mine economics and technology, and educate people how the company plans to minimize the impact and what the community will have after the company leaves.

Currently, Barrick Corporation has an extensive social responsibility program for the indigenous communities in Nevada. The key learning strategies for the Western Shoshone include the following:

- Informal engagement is the key to relationship building; Face to face engagement is critical to relationships;
- Put a face to the company, involve as many appropriate management staff as practical in the relationship;
• Employ only people to interact with indigenous peoples that respect them – non-verbal communication is especially important with indigenous people
• Strong support from the company is critical – efforts must be meaningful in scale and scope and those engaging must be empowered;
• Ability to make many types of decisions on the spot is important – e.g. community investments and program scale/scope, meeting arrangements, etc. – don’t always say “I will get back with you”;
• Go out of your way to make sure as many members of the community as possible learn the facts by wide communications;
• Ensure community investment touches as many households as practical – give as many people as possible a reason to place value on company’s presence while addressing actual needs. (Power Point Presentation Key Learning Strategies, provided by Tim Buchanan).

**Collaborative Agreements between the Barrick Corporation and Western Shoshone Committee.**

In 2008 Barrick Corporation and Duk Valley Western Shoshone Committee signed a Collaborative Agreement. The Western Shoshone committee includes the Duchwater Shoshone Tribe, the Battle Mountain Band, Te-Moak Tribe, South Fork and Wells Bands, Ely Shoshone Tribe, and the Yomba Shoshone Tribe. The major goal of the Agreement is to establish a dialog to “discuss and exchange ideas in a positive atmosphere in order to develop a better understanding of the Western Shoshone way of life and gold mining operations”. The deeper understanding and respect of each other is a necessity for the successful dialogue. By signing the Agreement, Western Shoshone showed respect to Barrick’s plans to “continue conducting its operations in accordance with applicable regulations and laws”.

The Agreement includes three sections: 1. General Agreements; 2. Establishment of the Western Shoshone Scholarship Foundation; 3. Miscellaneous.

**Section 1.** “The General Agreements” has next points:

- Mutual Cultural Awareness. Both Barrick and Western Shoshone agreed to
provide the training for each other to better understand Native American culture and mining objectives.

- Effect on Dialogue Participants’ Rights to Challenge Barrick Project. The sides agreed that the Agreement is a legal action. The western Shoshone do not give up the right to challenge Barrick’s projects in the courts, agencies and legislature.

- Access Through and Around Operations. This section describes the Shoshone access to the lands near mines for traditional activities and ceremonies. Safety is a high priority of Barrick’s employees.

- Reclamation. Barrick agree and proffer that the disturbed land must be restored to the healthy conditions, Shoshone agree to review the reclamation plan and provide comments.

- Western Shoshone Cultural Advisory Group. The Group with which Barrick Corp. can interact when it develops new mining projects.

- Employment Opportunities. Barrick agreed to establish training and programs to increase the Shoshone potential for employment in the mining industry.

- Commercial Ventures. Barrick will work on identifying opportunities for business ventures development involving the Tribes.

- Community Wellness Programs. Barrick agreed to bring contributions in the future to the health, education and economic status of the community.

- Continuing Dialog. Both sides agreed to continue the positive dialog in the future.

**Section 2** “Establishment of the Western Shoshone Scholarship Foundation” describes the details related to the scholarships which Barrick created for community education support. For example, the source funding is based on the mine outcomes which are located in the areas traditionally inhabited by Tribes. The award includes $3000 per school year for a student for a 2-year education program, and $6000 per year for a student for a 4-year educational program. The scholarships are available for the University and College programs.

**Section 3.** “Miscellaneous” describes the involvement of all Tribes (including Battle Mountain Tribe) in the agreement. The participants agreed to amend the agreement from
time to time. This is an important practice, because the agreement is moderated according to the current issues.

The original agreement was signed in 2008, the copy of the agreement that was introduced to us by Tim Buchanan, was signed on March 20, 2014. The Battle Mountain Tribe did not sign the agreement.

In February 2015 Barrick’s social responsibility program was developed and prepared for signatures, and entitled: Agreement “Engagement and Collaboration with the Western Shoshone in Northern Nevada” (Agreement was provided by Tim Buchanan) The “Partner Communities” for the Engagement and Collaboration include the following tribes: Duckwater Shoshone Tribe; Ely Shoshone Tribe; Duck Valley Western Shoshone Committee; Yomba Shoshone Tribe; Te-Moak Tribe of the Western Shoshone; South Fork Band of the Te-Moak Tribe; Wells Band of the Te-Moak Tribe; Elko Band of the Te-Moak Tribe; Battle Mountain Band of the Te-Moak Tribe.

The Collaborative Agreement emphasizes that Barrick does not conduct any activities on tribally-owned lands in Nevada, and describes “the community engagement and development programs that Barrick is implementing in collaboration with the Western Shoshone”.

Description of the program:

**Engagement:** the program includes the Quarterly “Dialogue” meetings that are hosted by the tribes. Those are open public meetings; informational meetings- meetings with council leadership, meetings with managers of tribal programs that Barrick supports, witnessing ongoing programs/initiatives which Barrick supports; attending traditional tribal celebrations and other community events; other formal meetings which include Cultural Advisory Group meetings, Western Shoshone Scholarship Foundation Board Meetings.

**Employment.** “Barrick has supported the delivery of Mine Safety and Health Administration approved safety training in Western Shoshone communities to better prepare prospective Western Shoshone employees for roles in mining operations”. Also, Barrick worked together with the Great Basin College in Elko, NV to develop training programs for the community.
**Education.** The primary goal of this program is to increase the Shoshone community involvement in the higher education. This program includes scholarships for University, College or Vocational Schools (The accumulated balance in the fund exceeds $3.6 million); mentoring, counseling and after-school programs (K-6 education); and “Other educational initiatives”, for example, computer hardware and software that is available for children’s use during and after school, educational infrastructure on the tribal land (e.g. schools, gyms, computer centers), internships in tribal agencies for the Legacy Fund scholarship recipients.

**Culture and Language.** Barrick will support the Shoshone language program through the Shoshone Language Project in the Department of Anthropology at the University of Utah. In addition, Barrick will support production of the children’s books, dictionaries, video games, and animation movies in the Shoshone language.

**Community Wellness.** This program focuses on Barrick support for improving social aspects of the Shoshone community, including elderly tribal members’ needs (housing, home care, utilities, elder centers, etc.); summer youth employment programs and other programs/events for youth; sports and recreation; diabetes and general health issues; substance abuse; domestic violence; child welfare; construction, upgrade and/or maintenance of community infrastructure (roads, buildings, emergency response, etc.); comprehensive community planning.

**Economic Opportunity.** The Agreement also focused on the methods for Barrick to utilize tribal businesses, including: a. Businesses which can serve Barrick’s needs for goods and services. b. Businesses which benefit the entire tribe (tribal businesses). c. Business that are owned by individual community members. Barrick will utilize small businesses of the Western Shoshone: Trucking Company, growing plants native to Nevada for reclamation, and light construction businesses.

In conclusion, Barrick, particularly in the 2015 Agreement was able to understand the concerns of the Western Shoshone better than previous efforts (and agreements). This appears to have been successful at least in part due to the approach Barrick has taken to work with the Western Shoshone people. When a mining company brings careful attention and support to the social–economic state of the community, the Tribe’s
concerns on social, cultural and environmental impacts of a mine can be mitigated and allow continued dialogue and partnerships that can produce mutual benefits. However, these issues remain considerably different than concerns that dominated the discussion on the Stillwater mine (see chapter 2). The discussions that occurred during the development of the Stillwater Agreement demonstrate that different groups of people will have different concerns; indigenous types of agreements are likely to be distinctly different than those where environmental concerns are prevalent.
Chapter 8.
GNA case studies.

In 2004, the Natural Resources Law Center located at the Colorado University Law School, in Boulder, Colorado published the report “Evaluating the use of the Good Neighbor Agreements for environmental and community protection, 2004” (Kenney et al., 2004) with the summary of GNA’s case studies. The report analyzed 13 GNA cases in the United States. The authors included specific case studies in their report only if: (1) they were developed and implemented in the US; (2) they needed to be a written agreement; (3) the agreement must involve more than one community group; and (4) concerns must include environmental pollution, and impacts on human population. All 13 cases were initiated by different companies that generated the impact and various community groups. The agreements were implemented in nine USA states: CA, CO, ID, LA, MT, NY, OH, PA, TX. Companies that implemented the GNAs have different specializations, just two of them are mining companies and one is a gas company:

Table 8.1. The range of issues covered in GNA’s (Kenney et al., 2004)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical</td>
<td>3</td>
</tr>
<tr>
<td>Dairy</td>
<td>1</td>
</tr>
<tr>
<td>Industrial Gas</td>
<td>1</td>
</tr>
<tr>
<td>Mining</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>1</td>
</tr>
<tr>
<td>Refinery/Petrochemicals</td>
<td>4</td>
</tr>
<tr>
<td>Waste Processing</td>
<td>1</td>
</tr>
</tbody>
</table>

The basis for each of the agreements were different, and reflected local concerns. However, some issues were similar and included the following. Nuisance (noise, traffic, odors) was included in 12 agreements, public health concerns were included in 10 agreements; environmental impacts were included in 10 agreements; local economic impacts were included in 6 agreements.
Table 8.2 provides an overview for each of the GNA implementation cases. The data for table 8.2 is adopted from the report “Evaluating the use of the Good Neighbor Agreements for environmental and community protection” (Kenney et al., 2004).

As discussed previously, GNA’s generally will be developed out of conflict regarding a specific proposal or impacts of an ongoing activity. These conflicts will often result from lawsuits or threats of lawsuits, and it is important to distinguish a GNA from a lawsuit settlement. A viable GNA should reflect a more cooperative nature where continuing discussions will help to resolve new issues, while a lawsuit settlement may lay down a specific set of requirements that have been negotiated and not promote further cooperative discussions. However, the level of negotiation and discussions will vary widely, depending on the issues being considered.

The cost of the GNAs implementation

Very limited data related to the cost is available, based on the table below, and those costs are generally not available for the general public. The cost will be substantially dependent on the environmental and social impacts, and also the company’s size, location of the impact related to the specific community(s), local economic and geographic conditions and other factors. However, from the available information we may conclude: the monitoring process may cost $10,000, the negotiation process: $3,000 - $15,000, meetings: $10,000, implementation: $500,000 – up to $2 mil. All agreements were in the range of $500,000 - $8,000,000, which is primarily related to the costs of implementation. However, the final cost of developing and implementing a GNA is dependent on several site and issue related factors, and can only be estimated when all factors are known.
Table 8.2. GNA Cases analysis. (Kenney et al., 2004).

<table>
<thead>
<tr>
<th>Parties</th>
<th>Cost</th>
<th>Lessons Learned</th>
<th>Negotiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntex Chemicals &amp; Boulder Residents for the Elimination of Air Toxics and Hazardous Emissions (BREATHE) (Boulder, Colorado.)</td>
<td>BREATHE estimates it has spent $8-10,000 on the negotiation process, 80 percent of which went to the outside consultants. The group did not spend anything on implementation other than the time of the group members (unpaid volunteers). It is not known how much the company spent on negotiating or implementing the GNA. The company did not provide any funding to BREATHE to assure its continued participation in the implementation process. The City of Boulder employees who participated in the process were paid by the City to oversee the implementation as</td>
<td>- GNA is a public relations tool by the company instead of as a way to reduce pollution. - If they had it to do again they would keep the negotiation process “in the public eye”; - focus more on the concurrent building of the community group to prevent burnout and dissolution; - anticipate the possible break-up of the group and build in contingencies; - and obtain formal commitments pertaining to reduction in chemical use.</td>
<td>- Advice from BREATHE to other groups considering a GNA includes: reserve the right to be critical of the company’s actions; reserve the right to negotiate additional agreements as future issues arise; allow for ample ongoing review and monitoring of the agreement; be careful of public relations ploys; don’t confine yourself to the terms of pre-existing templates for an agreement; be bold and innovative; and ask for more than you want; - The final agreement included the following provisions: Syntex agreed to: install a thermal oxidizer; testing and monitoring requirements including documentation of burn efficiency by a third party; a fugitive emission reduction plan, and; an independent facility review by an outside consultant selected by all three parties; The City and BREATHE agreed to: not require Syntex to go through the use review process for the proposed modification; drop their insistence on limiting emissions due to future expansions in the GNA.</td>
</tr>
</tbody>
</table>
Citizens of Owyhee County Organized Association (COCOA) And Idaho Dairies.

COCOA estimates that they have spent a total of $4,500 in the negotiation of the GNA. The total cost thus far of implementing the GNA is estimated to be $13,000. The largest expenditure was the hiring of a hydro-geologist to set up the water quality monitoring system. COCOA expects to spend $10,000 to maintain the conditions of the GNA. The Dairies do not provide funding to COCOA to ensure its continued participation in GNA-related activities; however, Dairy Management does pay for his water testing.

If they had to do it again, they would have added shallow test wells, and testing for hydrogen sulfide and odors, to their negotiating process. They also would have added a provision to the GNA asking for funds to hire an attorney.

One unexpected benefit of the GNA experience was that some of the neighbors seemed to bond together, and it was also viewed as an outlet to keep people involved in their community.

The resulting GNA contained the following major provisions:
- Dairies agreed to allow the testing of water from wells located on the dairy.
- Dairies are required to submit a detailed plan for the monitoring program to the department for review and approval prior to diversion and use of water. The plan shall provide for testing of water from at least one well hydrologically up-gradient from the Dairy and at least one well hydrologically downgradient from the Dairy.
- If the Dairies do not comply with the conditions of approval for this permit, the IDWR may revoke the permit;
- The operation of the Dairies will not cause contamination of ground water and/or drinking water;
- There will be no discharge of pollutants into water except as permitted by state and federal agencies;
- Agreed to a maximum density of animals per acre;
- Agreed that the facility would not be a nuisance as defined by Idaho regulations;
- Lights on the Dairies shall be shielded to keep the light source pointing down and inside the property lines of the Dairy;
- The lagoon is to be lined with a grade of vinyl appropriate for manure management;
- The settling ponds are also to be lined with vinyl or concrete;
- The best available odor controlling practices are to be used in manure storage structures;
- The Dairy agreed to requirements relating to the total capacity of manure storage structures. These structures must also have adequate diversions to contain any spillage or rupture;
- There must be an EPA approved clean-up plan in place for the manure storage facilities;
- Requirements were established as to what may be deposited in the manure storage structures.
- The Dairies agreed that the water consultant will select the monitoring wells and will determine if a test well is needed;
- If the Dairies close, they agree to submit to an EPA closure plan for the facility.
COCOA agreed to:
- End protests and negative publicity targeted toward the Dairies.

| Community/Labor Refinery Tracking Committee and Sun Oil | C/LRTC spent $0 on the negotiation process. Organizing support was provided on a pro bono basis by Clean Water Action. Legal representation was provided on a contingency basis by the Public Interest Law Center of Philadelphia (“PILCOP”). As part of the agreement, Sun paid PILCOP $75,000 plus $4,500 per quarter until Sun’s obligations were met. The company spent an estimated $5,500,000 on implementing the agreement. Sun did not provide funding to C/LRTC to ensure its continued participation in GNA-related activities. | If he had it to do again, he would have liked the GNA to last longer than the Consent Decree did. He reports that a significant amount of work went into getting the siren system and other projects implemented which stretched the resources of the community group. | The major provisions of the Consent Decree are as follows:
- Sun agreed to invest more than $5 million to improve its air pollution controls to decrease the release of sulfur dioxide, smoke and odors, including installation of color TV cameras and video recorders for observing flares;
- Sun agreed to pay $500,000 in pollution penalties, with $150,000 going directly to the City, $200,000 going to projects that would benefit the environment and health of the communities around the facility and $150,000 going toward establishing a community emergency notification system;
- Sun agreed to provide more information to residents on activities at the refinery, including:
  Quarterly reports concerning various operations, Incident investigation reports on significant airborne releases of contaminants, Notification of planned maintenance or repairs along with environmental impact studies seven days in advance, and Notification of emergency repairs;
- Both the City and C/LRTC had the right to conduct site visits to observe operations and inspect monitoring records;
- The parties agreed to establish a three-member Operating Committee to carry out certain provisions of the Consent Decree;
- Sun agreed to pay stipulated penalties if it failed to comply. |
| Concerned Citizens of Norco (CCN) and Shell Oil | The costs of negotiating the GNA included $8,000 for a facilitator (split between Shell and the community) and $1,000 for conference calls to link out of town participants to the negotiating sessions and to conduct strategy sessions. In addition, members of the seven participants representing NGOs contributed an average of 15 hours per person per week. The company did not provide any funding to the community group or the NGOs to ensure their continued participation in monitoring the implementation of the GNA. The costs of the implementation process so far include $5,000. | If they had a chance to do it again, they would have had more training for the negotiation team prior to meeting with the company. Advice to other groups considering a GNA is to try to get what you want in a closed time frame, so you don’t have the headache of having to monitor the company into the future. The group is still in negotiations with Shell regarding a health clinic that has yet to be determined. | - Shell to pay a temporary relocation allowance to families who chose to have extensive renovations done to their homes;  
- Rent disruption allowance provision applied;  
- Professional service allowance provision implemented;  
- Clear site bonus provision was given;  
- Equity advance provision implemented. |
| **Ohio Citizen Action, Environmental Community Organization And Rohm and Haas** | OCA estimates that it spent roughly $3,000 on the negotiation process and another $6,000 on the implementation. R&H spent an estimated $10,000 for the meeting facilitator and will spend over $2 million on implementation costs after all process modifications are completed. R&H does not provide funding for any community group to offset the costs of monitoring the GNA. | If they had it to do again, they would consider trying to get a signed agreement. One unexpected benefit of the GNA process was that the plant manager became more involved with his employees even outside of this process. Another benefit was the great working relationships that developed among the participants. OCA has no concerns about the future of the GNA at this time as the company meets monthly with neighbors and community groups to address any concerns. If the company were to renege on its commitments, the OCA could canvass again at any time to bring them back to the table. Belz’ advice to others considering a GNA is that canvassing is a very effective tool. | The specific commitments that the CWG sought were to: - Eliminate truck parking/idling outside the plant before 7 a.m.; - Eliminate odors; - Reduce/eliminate toxic releases of chloromethane, and - Establish an emergency response and notification plan for neighbors. |
| **Seneca Babcock Environmental Subcommittee (SBESC), Buffalo** | The GNA negotiation and implementation costs for the SBESC have been | If they had it to do again, they would like to speed up the process and possibly come out with a more legally binding document. | - Traffic mitigation provisions are specifying truck routes and prohibiting incoming truck backups or engine idling; - Noise limitations on machinery and prohibitions of certain types of operations (stone or concrete crushing); - Limitations on hours of operation; |
| **Common Council (BCC) and Seneca-Babcock Industries** | less than $1,000. The BCC spent about $3,300. The individual company costs are not known. | Also, they like to see quicker solutions to prevent wearing down community activists. Parties would also like to obtain full-scale agreements with some legal teeth that would contain specific pollution reduction goals. Advice to other groups considering a GNA is to stay committed, don’t give up or become intimidated, develop strong strategies to get the companies involved, and hire someone to monitor the company and report back to the group if you are able. | - Property upkeep requirements;  
- Prohibition on accepting certain types of waste materials;  
- Installation of plastic dust curtains if necessary;  
- Requirement of advertising all job openings at local community center;  
- Report of pollution prevention progress, including plans and initiatives, provided to SBESC annually;  
- Public portions of Process Safety Management Plan, Risk Management Plan, Process Hazard Analysis, and Facility Response Plan provided to SBESC at no charge at the same time they are filed with appropriate regulatory agencies;  
- Maintenance of a Continuous Emissions Monitoring System;  
- Continued participation in operation and maintenance of Community Alert Network (CAN) emergency notification system;  
- Participate in neighborhood emergency response drill;  
- Notification provided to SBESC of unusual plant activities such as shut down or start up as well as spills or releases to air, soil, or water;  
- Annual meeting upon request of SBESC. |
| **Shoreline Environmental Alliance, CBE, Crocket/Rodeo Coalition And Unocal** | No specific cost information was available for negotiation of the GNA. An estimated $45,000 was spent by SEA for implementation, and it is not known how much Unocal spent, but the funding commitments easily exceed several million dollars. The GNA did not specifically provide for funding for | If the group had it to do again, they would reduce the number of people at the negotiating table; only negotiate issues that dealt directly with the mitigation of the toxic releases; keep the issues more focused; get more money; have an airtight redress process and legal section. The parties did “take it to the streets” and applied political pressure; that allowed certain provisions in the GNA to be enacted even before the GNA | In the final document, Unocal agreed to the following provisions:  
- Health Risk & Medical Monitoring  
  Continue to fund independent health risk assessment;  
- Fund the establishment and operation of a medical clinic for diagnosis and treatment of people affected by the Unocal Catacarb release incident;  
- In the event of a release, work with local health care providers to provide early medical intervention for affected residents;  
- Fund epidemiological study of the health impacts of recent chemical release of the affected members of the community;  
- Emergency Response and Community Warning;  
- Create and fund a health effects database;  
- Participate in a working group to develop a feasible community-based information and notification system that will meet the community’s needs; and  
- Fund the purchase and installation of a siren as part of the county community warning system.  
Vegetation and Parks:  
- Plant vegetation on land between the refinery and Rodeo; |
| Oversight and Implementation Activities Performed by SEA or other Community Groups. Kasha Kessler states that a portion of the annual $100,000 contribution to each community was supposed to go to oversight, but Community Foundation politics prevented this from happening. | was signed. | - Fund construction of a bike path through Unocal property; and  
- Contribute $5,000 each to Lindsay Museum and the Carquinez Preservation Trust for trees.  
School Safety Issues:  
- Install and maintain a permanent monitoring station at the local elementary school;  
- Provide emergency response education and training to teachers and students; and  
- Contribute $500,000 to the elementary school for chemical safety issues.  
Vocational Training and Local Hiring  
- Fund vocational training at local high school;  
- Announce job opportunities locally; and  
- Institute and fund a local hiring outreach program.  
Transportation:  
- Mitigate traffic impacts from construction of the Reformulated Gasoline Project;  
- Contribute $4.5 million to the county for local roads; and  
- Discontinue use (and transportation) of anhydrous ammonia by 12/31/01.  
Environmental Issues:  
- Install a state-of-the-art fenceline monitoring system;  
- Fund an independent audit of the refinery;  
- Reduce onsite emissions of Volatile Organic Compounds (VOCs), and  
- Make audit and study results available through the Community Advisory Panel.  
Financial Issues:  
- Contribute $300,000 annually to local communities and schools;  
- Funds not spent can be carried over to the following year; and  
- Agreement to negotiate a continuation of payments after 15 years. |
|---|---|---|
| **Texans United Education Fund and Rhone-Poulenc** | No information is available regarding the costs of negotiating or implementing the GNA. | If parties had it to do again, they would speed up the process; be clearer on what they want; better prepare the group for the negotiating process, and make the agreement less legal and more easily understood. | In the final agreement, RP agreed to the following provisions:  
- Recognize and work with the CAC.  
- Upon request, provide financial assistance to the CAC in an amount agreeable to both the CAC and RP to cover administrative costs of the CAC.  
- Discuss and negotiate an improvement of local emergency notification procedures. The CAC is allowed to have input into the design of this system.  
- Notify the CAC of any changes to designated hazardous waste transportation routes and provide the CAC with information regarding the |
Overall, advice to other groups considering this tool is to be clear, keep it simple and straightforward, keep government agencies out of the process, and “be tough.”

| West County Toxics Coalition, CBE, People Do! and Chevron Refinery | Cost information is not available for this GNA. Chevron did not provide funding for any community group to ensure its continued participation in the implementation process. | Unexpected benefits from the process were the feelings of community empowerment and the education received by those who were new to such an endeavor. The primary concern is the ability of the community group to monitor the implementation process. Both respondents consider a GNA to be worth pursuing, but it will not solve all the problems. | It took approximately one and a half years to negotiate the GNA. The final agreement contained the following provisions: - Pollution Elimination, - Install leakless valves, - No pollution credits for the valve emission reductions, - Fence line air pollution monitoring with community-suggested target chemicals, - Continue toxic emission reductions; Local Economic Commitments: - $5 million over five years to nearby neighbors through United Way and nonprofit service organizations, - Skilled job training to 100 fenceline neighbors, - Aggressive pursuit of community-based hiring, - Emergency Response and Health Care Commitments, - Install sirens/computers and train emergency workers, - Establish and fund city emergency services coordinator position for five years, - Contribute $2 million to the local health center. |
| Western Slope Environmental Resource Council and Bowie Resources | WSERC estimates that they have spent at least $15,000 annually in the negotiation and implementation of the GNA. The | If they had it to do again, they would have asked for funds to pay someone to monitor the implementation. Additionally, the bankruptcy contingency is something that should be planned for in the GNA, as is frequency of shipments of hazardous waste or materials into the plant. - Make available to the CAC groundwater and surface water monitoring data as well as providing split samples for independent analysis. - Provide the CAC with employee health study results and work with the CAC to determine the feasibility of a citizens’ health survey. If pursued, RP will help develop the survey and cover the administrative expenses incurred by the CAC in performing the survey (up to $4,000). - Allow the CAC to participate in emergency response planning involving potential fires, explosions or releases of hazardous substances - Provide the CAC with information regarding OSHA recordable accidents on a monthly basis. | The resulting GNA contained the following major provisions: BRL agreed to: - Substantial reclamation work; - Build a new mine-to-train conveyor and loadout that would eliminate 978 trucks/day; - Construct turning and acceleration lanes on Highway 133 as an interim measure; |
The internal challenge of transferring GNA implementation responsibilities during staff turnovers. Their advice to others considering a GNA is to be very clear about why you are choosing this tool, be sure it will get you further than other tools (lawsuits, etc.), and have bottom lines and do not give up on them.

- An annual production cap;
- Pay a penalty if the annual production cap is exceeded;
- No new mine portals in certain areas;
- Conduct a baseline noise study;
- Not exceed baseline noise levels when production increases;
- Pay a penalty for noise violations;
- Prepare a state-approved water augmentation plan prior to mining within one mile of Terror Creek Reservoir; and
- Contribute up to $500,000 to the community rail mitigation trust.

WSERC agreed to:
- Support BRL’s ongoing permit;
- Support BRL’s pending application to mine the Iron Point Lease;
- Intervene on behalf of the mine should an appeal by an outside group threaten the GNA; and
- Formally oppose any stay of the lease resulting from an outside appeal.

The data for the table is adopted from the report “Evaluating the use of the Good Neighbor Agreements for environmental and community protection” (Kenney et al., 2004)
Summary of the case studies provided by Natural Resources Law Center

Report “Evaluating the use of the Good Neighbor Agreements for environmental and community protection” (2004) summarized GNA’s implementation strategies and focused on three questions:

1. What are the unexpected benefits from GNA implementation?
2. What would you do differently?
3. What is the final advice for the companies who would like to create GNA?

The reason for the report was a request from the Northern Plains Resource Council to analyze all agreements in the US for the potential improvement of Stillwater’s agreement. Its goal was to identify the successes and failures. It took three years to collect the data for the report. The report’s summary is provided in the Table 8.3.

Table 8.3. Summary of the GNA’s key studies. (Kenney et al., 2004).

| 1. What would you do differently? | - Reduce the number of people at the negotiating table;  
| | - Keep the issues more focused;  
| | - Get more money;  
| | - Have an airtight redress process;  
| | - Keep the negotiation process in the public eye;  
| | - Obtain formal commitment to reduce chemical use;  
| | - Focus more on building the community group to prevent burnout and dissolution;  
| | - Anticipate possible break-up of the group and build in contingencies;  
| | - Increase the term of the GNA;  
| | - Speed up the process;  
| | - Create a more legally binding agreement;  
| | - Better prepare the community negotiating group;  
| | - Make the GNA less legal and more easily understood;  
| | - Ask for funds to monitor the implementation;  
| | - Ask for funds to pay for technical consultants. |
| 2. What are the unexpected benefits from GNA implementation? | - Increased respect for the community group;  
| | - Empowerment of the community group;  
| | - Increased credibility of the community group;  
| | - Learning experience;  
| | - Plant manager became more involved with employees;  
| | - Developed great working relationships between the parties;  
| | - Implementation of state of the art monitoring systems;  
| | - Greater community awareness;  
| | - Water monitoring in place. |
| 3. What is the final advice for the companies who would like to create GNA? | - Go into the process with a united front; |
## Advice for the Companies Who Would Like to Create GNA?

- Make sure legal section is enforceable and legal action financed;
- Reserve the right to be critical of company actions;
- Be careful of a company’s public relations ploys;
- Ask for more than you want;
- Make sure you are ready for a lot of hard work and a long-term commitment;
- If possible, hire someone to monitor the company and report back to the group;
- Canvassing is a very effective tool;
- Be clear, keep it simple, keep government agencies out of the process, be tough;
- Worth pursuing, but won’t solve all problems;
- Be sure you will get further than using other tools (lawsuits, etc.);
- Have bottom lines and stick to them;
- Try to get what you want in a closed timeframe;
- Obtain financial commitments prior to entering into the negotiation to level the playing field;
- Stay committed – don’t give up

The conclusion from the GNA case studies evaluation is that GNA’s can be quite useful, but also offers a general warning of the time and financial commitment for effectively all of the parties involved in the development of the GNA. With respect to mining GNA, the cost might not be as high as for some of the chemical facility issues discussed, but clearly will not be inexpensive, but hopefully the ultimate result will be a reduction in conflict. This has proven to be the case for the Stillwater Mine GNA. The costs of implementation of a GNA may not be much different than compliance with the appropriate environmental regulations, but as can be determined from Table 8.2, some social and community costs are included, and the cost of those factors will depend on the individual circumstances of each GNA.

Most of the GNA implementation processes are poorly documented, although all of the agreements have an extensive list of terms and substantive characteristics. The environmental concerns are only part of the agreements and most often, the community issues are also related to the economic and social benefits that can hopefully accrue. At some point, legal advice is likely going to be required, but there is scant information on the attorney costs and no specific examples how the bargaining negotiations proceeded, except, perhaps for the Stillwater GNA. Finally, no examples are provided on how these
GNA’s handled unforeseeable circumstances. For example, what are the companies’ strategies when they give promises to the community, but find later that implementation of these promises is extremely expensive or infeasible? GNA are still a fairly recent occurrence, and differ widely on how they have been implemented and the ultimate benefits. However, the report provides support that a GNA can be a valuable tool to achieve stable and productive relationships with the community, and when used under the right circumstances, a GNA can be a benefit to both the community and the industry.
Chapter 9

GNA Step by Step Implementation Guidelines.

The first step for the GNA development is to determine whether a GNA is even appropriate. At least for Stillwater, and perhaps also for the Shoshone agreement in Nevada, the GNA was developed out of conflict, and became a useful tool to improve communication and reduce conflict. Because of the expense and effort for developing a GNA, a compelling need is required for the mine prior to beginning the process. This can be a relatively narrow issue, such as requiring water quality standards that may not be covered by state of federal standards. Or, it can be a very broad set of issues that includes social, economic and environmental concerns, which would require a more extensive GNA. Thus, the first step is for each group to make a decision on whether there is sufficient time, energy and money to see the process through.

The second step is to determine if the issue(s) of concern can be handled better by other means, including the current regulatory systems. How effective is the local political and regulatory system; what is the company’s relationship with the local government, and the ability of the company to build trusting relations with the community? What is the level of public disagreements and issues related to the mining project and the company’s ability to work on building trust with the community and stakeholders? Are the critics of the mine willing to compromise, and are they sufficiently unified that the group(s) involved in the GNA development can speak for those interests? The third step of the GNA development is to determine the GNA requirements. Requirements include but are not limited to: time and budget availability; effective regulatory system and supplement to the federal and the state regulatory oversight; determination of local concerns and establishing trigger frameworks for environmental monitoring; financial resources for hiring the independent consultants/technical experts; readiness to build “personal relationship”; availability of the motivated parties and volunteers for agreement development; company must be ready for the negotiation and able to consider the indigenous peoples’ issues.

During all steps of the GNA creation attention should be focused on the three
basic directions that are provided in Table 9.1.

*Table 9.1. The three basic directions for GNAs.*

<table>
<thead>
<tr>
<th>Community Network</th>
<th>Company commitment</th>
<th>Relationship with agencies</th>
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<tbody>
<tr>
<td>Identify the list of stakeholders; identify leaders; negotiate in a trusted relationship.</td>
<td>The culture of entitlement; operation philosophy; personalities.</td>
<td>Open information; insurance; bonding</td>
</tr>
</tbody>
</table>

To make these directions successful, the GNA’s work group must be focused on the “3C” requirements for the successful GNA implementation: communication, compromise, conflict resolution.

The third step in the GNA development is to establish the process for engagement, which includes a stakeholder engagement plan, and the procedures for the discussions.

Methods for stakeholders’ engagement usually depend on the goals of engagement (create the dialog lines, collect data, determine the local issues and concerns, establish the negotiation process) and available resources: time, people, budget. At this point, all participants need to recognize the possible risks from the engagement. Will attorneys need to be involved in this discussion? Will outside consultants be required, particularly for the non-technical participants in the discussion?

The next step includes the identification of the local concerns and issues from the different stakeholders groups. One of the best methods for the issues determination is personal inspection - visiting the areas and talking to people in the community meetings. However, sometimes this method is not possible due to the geographical or time conditions.

The negotiation process is the next step. A more complete discussion of the negotiation process is described in Chapter 4 “Communication Tactics”. The preparation for the negotiation includes analysis of the local geographical, political, economic and cultural conditions; analysis of the EIS, permits for the operations and the post–closure plan. The negotiators should understand the issues that must be solved, and the benefits
from the GNA implementation for all parties.

According to the “Evaluating the use of the Good Neighbor Agreements for environmental and community protection”, successful utilization of the GNA process requires three stages, where every stage may take considerable time and effort: Stage 1 - getting the company to the negotiation table, Stage 2 - GNA negotiation/design, and Stage 3 - implementation. The company and stakeholders must be prepared that the process may fail at any of these stages. Table 9.2 describes these stages.

*Table 9.2. Prerequisites to using the GNA approach successfully (Kenney et al., 2004).*

<table>
<thead>
<tr>
<th>Stage 1: Forcing the Company to Negotiate</th>
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<tbody>
<tr>
<td><strong>Sources of Leverage</strong></td>
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<tr>
<td>- Company needs a permit or similar public approval</td>
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<td>- Company is vulnerable to a lawsuit (particularly related to environmental law compliance)</td>
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<td>- Company requires/desires good public relations (or must avoid adverse publicity) in order to maintain or expand profitability</td>
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<td>- A change in company personnel/ownership creates an opportunity for a new relationship</td>
</tr>
<tr>
<td><strong>Resources / Strategies</strong></td>
</tr>
<tr>
<td>- Litigation and/or permit challenge</td>
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<tr>
<td>- Publicity, media relations, and activist strategies (e.g., letter writing, editorials, demonstrations)</td>
</tr>
<tr>
<td>- Leadership; the willingness of leaders (on both sides) to “try something new.”</td>
</tr>
<tr>
<td>- Knowledge of the company’s needs/desires</td>
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<tr>
<td>- Environmental data (e.g., monitoring results)</td>
</tr>
<tr>
<td><strong>Other Advice / Observations</strong></td>
</tr>
<tr>
<td>- Have a very clear idea of what you want before entering a negotiation; have a “bottom line” established</td>
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<td>- Articulate the possibility of a win-win solution</td>
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<td>- Pick your fights carefully, and be prepared to deliver on threats</td>
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<tr>
<td>- Begin research on the company and its manufacturing processes; consult outside experts if needed</td>
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<tr>
<td>- Beware being coopted or diverted through a company-controlled Citizens Advisory Council</td>
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<table>
<thead>
<tr>
<th>Stage 2: GNA Negotiation and Design</th>
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<tbody>
<tr>
<td><strong>Sources of Leverage</strong></td>
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<tr>
<td>- Must have something valuable to offer (e.g., drop a permit challenge or lawsuit; end a bad publicity; assist in permit approval and generating good publicity)</td>
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<tr>
<td>- Must have demands/requests that the company can theoretically meet</td>
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</table>
| Resources Strategies | - Negotiation skills/training; coherent negotiating strategy  
|                     | - Adequate understanding of technical issues (e.g., science, law); must have appropriate data (e.g., monitoring data, company profile)  
|                     | - Must have a strategy for structuring an agreement that facilitates implementation, and real problem-solving (e.g., the agreement must provide leverage/resources for implementation)  
| Other Advice / Observations | During GNA Negotiation:  
|                     | - Select negotiators carefully  
|                     | - Transcribe negotiations  
|                     | - Establish and enforce negotiation deadlines; understand that many companies’ strategies are designed to wear down communities (e.g., delays in negotiation, providing too much information, agreeing to things they plan to fight later during implementation, etc.)  
|                     | - Maintain community organization and activism throughout the process; maintain a unified front; guard against cooptation  
|                     | - Cultivate and maintain an image of reasonableness, credibility, and professionalism  
| Stage 3 Implementation |  
| Other Advice | In the GNA Document:  
|                     | - Anticipate the implementation demands of all concessions: to the extent possible front-load the agreement by getting provisions that don’t require ongoing monitoring or enforcement; schedule company concessions to come before the community group concessions  
|                     | - Strive to make agreements legally binding; consider having agreements embedded in federal court consent decrees or permit conditions  
|                     | - Establish a process to deal with future, unanticipated issues (e.g., the sale or bankruptcy of the company); assume that the company will eventually try to walk away from the agreement.  

The last step of the GNA development is legally binding of the agreement and the signatures. After that, the GNA has a legal form and implementation stage may begin.
Conclusions

The Good Neighbor Agreement is a potentially useful method for improving communication and resolving challenging social and environmental issues between concerned citizen groups and a mining company. The purpose of this research was to investigate the utility of these agreements using past GNA’s as examples, particularly the GNA developed between the Stillwater Mining Company in Montana and environmental groups concerned about the impacts of this palladium mine.

The research site used for this project is the Emigrant Mine (Newmont) and surrounding communities located in the state of Nevada, USA. This mine was initially controversial, due to its proximity to an acid generating mine (Newmont’s Rain Mine), but further information developed by Newmont indicated that the rock at the mine site was almost entirely not acid generating. However, this site served as an example of how to develop a GNA, when the situation called for a GNA. The research presented here included the development of step–by step guidelines for GNA implementation, determination of the GNA relevance for the Newmont mining operation, establishment of the conditions for GNA implementation, and analysis of the industry’s corporate responsibility strategies, that may be useful for GNA implementation. The research included data collection through a number of field trips, community meetings including meetings with indigenous people, meetings and discussions with representatives from other mining companies in the US (Kinross Co., Stillwater mine corporation, Barrick Gold Mine, Nevada), participation in workshops related to the mining corporate responsibility (IRMA, E-LAW), collection of environmental regulations and permitting data from the Nevada environmental protection division located in Carson City, NV, analysis of European and north- and south-American databases and case studies, review of annual mining corporate reports and other relevant sources.

A GNA will necessarily develop out of conflict, since if there is no opposition to a mine, the time, effort and expense of developing and implementing a GNA would not be warranted. But, when a conflict on a mine arises, and the participant positions are
amenable, a GNA may be helpful both to the community and the mining venture. Using the Emigrant Mine as an example, we determined the list of stakeholders for the Emigrant Mine and the general mining industry in Nevada; created the online survey for the stakeholders; developed the stakeholder’s engagement plan with maps and stakeholder’s matrixes for the Nevada communities, analyzed the risk management tactics; analyzed the stakeholder’s consultation methods, analyzed negotiations strategies and tactics; determined limitation factors for GNA.

Based on all collected and analyzed data the following final conclusions are made:

1. A GNA is a potentially useful method for improving communication and resolving challenging social and environmental issues between concerned citizen groups and a mining company when appropriate conditions exist.

2. The project’s stakeholders, (particularly the local community and interested NGO’s) must be ready and open to start the dialog with mining companies with a goal of building a trust and long-term good relations. The utility of a GNA to a mining company will be substantially limited if groups of stakeholders are excluded or refuse to participate. If certain groups remain “outside of the tent” either by desire or exclusion, those groups will have effectively no restrictions on filing appeals or otherwise delaying or hindering a project.

3. Whether a GNA is warranted or not will depend on the relationships that a mining company has already established with the stakeholders. Over the past 20-30 years, Newmont (as well as much of the rest of the industry) has already established relationships with local community groups and local governments in the mining regions of Nevada, and is currently working to understand the processes for establishing economic and social benefits for the communities. While these efforts do not have the legally binding aspect of a GNA, they have proven to be sufficient for continued operation of mines and have gained the support of many local communities.

4. The indigenous community in Nevada demonstrated the ability to be advocates for their concerns, particularly related to cultural heritage. They have been active in protecting their interests, although there is currently internal disagreements on how to
work with or oppose certain mining efforts.

5. The costs of implementing a GNA can be substantial, and will depend on the conflicts that exist at a particular mine site. For the GNA for the Stillwater Mine, both sets of participants (the mining company and the neighbors/NGO’s) all felt that the time and resource costs were worth the effort.

6. The data analyses from the online survey show the different opinions from the three major groups of stakeholders: the local residents (local community), mining professionals (Nevada Geological Society), and from the environmental community. The survey showed that the major concerns and issues are different from all three groups, as well as their expectations from the mining industry in Nevada, and capability for the trust-based relations and open-line dialog. Based on these differences, the dialog between parties and the negotiation process will require careful thought and preparation by all parties in the GNA discussion. A GNA is unlikely to be useful for any of the stakeholders if the participants do not see an overall benefit. Also, consistent with the survey, there are likely many situations where a GNA will simply not work. Certain NGO participants and certain mining companies will simply not accept an agreement which constrains the participants to accept a mine or accept major restrictions on a mine. The Pebble Mine, proposed in Southwestern Alaska is one such example where a GNA would not be possible under the present circumstances.

7. The stakeholder engagement process is an essential part of establishing good long-term relations between a mining company and domestic residents. Without good relations, any operation is under the risk of disruption delays and unanticipated costs.

8. Developing a risk management strategy for the stakeholders’ engagement should be completed before the operation stage of a mine.

9. Mining companies will benefit from having staff with an area of expertise in corporate responsibility and communication. Most mining companies (including Newmont) have this specialized staff and function well in community affairs. However, during negotiations, the mining company, as well as the community organizations, should have persons at the negotiating table that have decision making stature. Depending on the issues, the participants should be well-versed in the local culture, be familiar with the
corporate environmental policy, be ready for questions from the other participants and maintain a positive attitude and behavior.

11. To the extent possible the discussions should avoid overbearing “lawyering” and produce a document that resolves the concerns that may exist in a straightforward manner, but still be legally defensible. This conflict is one of the challenges that confronts participants in a GNA discussion, and ultimately it is likely that attorneys will need to be ultimate participants in the agreement.

12. Mining companies are generally viewed as the participant that can offer funding to support the community groups and the NGO’s, and should be prepared to offer staff support for the citizen organizations, as well as technical experts who can provide technical advice to the citizen organizations. For the Stillwater GNA, the company covers partial costs of the staff support from the NGO, but also pays for the technical experts who advise the NGO’s. From discussions with the mining company staff, this appears to be a good investment, since the technical consultants can provide trusted advice on issues that exist, but in the same manner defuse issues that may not be important.

13. Overall three major components are essential for the success of a GNA—communication, compromise, conflict resolution, where communication has a greater role. Talking with people, understanding their concerns, talking with industry and local government during all implementation, can serve to keep all informed about the process and limit the impact of information that is incorrect or misrepresented.

14. A GNA cannot serve in place of a sound regulatory system that has clear requirements for protection of air, water and land, as well as a well-resourced staff who have the necessary authority. The GNA can augment a sound regulatory system, and reduce the concerns of neighbors and citizens who may have specific concerns or needs regarding the development of a mine that may be outside the regulatory purview of the regulators. It will also allow stakeholders and the mining company to develop a communication tool that will be direct and reliable.

15. GNA are uncommon in mining, and generally (although not required) will arise out of conflict between stakeholders and a mining company. A GNA is likely to be
successful only when the participants uniformly have come to the conclusion that working together is more efficient and will produce an ultimately better result than working against each other.

**The future research:**

The future research should address three basic aspects:

The experience with mining GNA’s is limited, and opportunities exist in many situations where agreements can provide a win-win for neighbors, NGO’s and the mining companies. Additional efforts could be made to publicize the value of a GNA and encourage use of the instrument when appropriate.

The development of an interactive, open-resource-based web page, could serve as a tool for independent assessment of mine environmental quality and as an educational resource that would provide instruction on how to use the GNA. More importantly, it could serve as mechanism for the conflict resolution between the mines and the local communities not only to resolve current conflicts but also aid to establish simple straightforward dialogue to help resolve potential future conflicts in the sustainable mining regulation process.

The range of applications of a GNA needs further study to attend to special concerns of specific groups or individuals who may have special concerns. While certain GNA’s can be focused broadly on the entire mine, other GNA’s can focus on specific concerns that may be outside the ability of regulators to regulate. Some of these types of agreements are already being undertaken, but a systematic understanding of such agreements and a collection of these agreements could be invaluable for stakeholders and the mining interest.
References

Primary sources:


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Secondary sources that are useful for understanding GNA’s:


Clark T. (1990). International marketing and national character: a review and proposal for an integrative theory. JMark: 66–79


Garner, E. (2003). The case for an international mining law, School of Business and law, Deaking University, Melbourne, Australia.


McCrae (Eds.), NEO PI-R professional manual. Odessa, FL: Psychological Assessment Resources.


Appendix 1.
Useful sources

Useful sources for the Security and Human Rights

1. Voluntary Principles on Security and Human Rights:
2. Implementation Guidance Tool "Voluntary Principles on Security and Human Rights."
   http://www.icmm.com/document/2199

Useful sources for the engagement methods and techniques

1. GTZ Mapping Dialogue
   www.neweconomics.org/gen/z_sys_publications.aspx
3. Participatory Learning and Action series, International Institute for Environment and Development (IIED), London
4. Participatory methods toolkit: A practitioner’s manual
5. World Bank on Participation and Civic Engagement

Useful sources for gender and engagement

1. CIDA policy and resource materials on Gender Equality
   http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/EMA-218123616-NN
2. Gender Checklist, Asian Development Bank
   

   

4. Gender and Participation, Bridge – Institute of Development Studies (IDS) UK
   
   http://www.bridge.ids.ac.uk/reports_gend_CEP.html#Participation

5. Gender Training Manual, Oxfam
   

6. OECD Gender Tipsheets
   
   http://www.oecd.org/document/34/0,2340,en_2649_34541_1896290_1_1_1_1,00.html

   Useful sources for negotiation and communication strategies


3. Alavi, K. Personal conversations.


Appendix 2.

Case Study: Improving Institutions through Transparency: Extractive Industries Transparency Initiative (EITI)\(^4\).

Proponents of transparency argue that government revenue received from mining and other extractive resources should be disclosed publicly. Transparency promoted as a way to improve institutions by reducing opportunities for government corruption and allowing citizens to hold their governments accountable for sound management of resources and their revenues. The international community launched the Extractive Industries Transparency Initiative (EITI) in 2003 in order to encourage transparency in government revenues received from oil, gas and mining. EITI has two pillars. The first is the full publication and verification of company payments and government revenues from oil, gas and mining. The second is to create in-country multi-stakeholder groups that discuss ways to manage the wealth being generated from the extractive industry.

Participation in EITI is voluntary. However, companies operating in EITI-compliant countries must disclose payments made to government. EITI represents a coalition of participating countries, international organizations, companies, institutional investors and NGOs. Canada is one of the developed countries supporting EITI, and Canadian mining companies and institutional investors also participate.

It is too early to tell whether EITI has improved institutions or government management of resource revenues, although some early successes have been achieved in identifying government corruption and failures to report revenues. Challenges also remain in the process, including a lack of transparency for sub-national flows that limit the ability of mining regions to know if any taxes or royalties have been returned to the regional level. Institutions also develop in particular contexts and may be linked, casting doubt on whether revenue transparency alone can improve institutional quality. EITI should therefore not be regarded as a silver bullet for ending corruption or for effective management of income, but rather as an initial step towards improved institutional quality.

Appendix 3.

\(^4\) Retrieved December 2014 from http://www.miningfacts.org/Economy/Are-Natural-Resources-a-Curse-or-a-Blessing/#sthash.2zNzswiW.dpuf
Typology of issues, manifestation of conflict, cost to, and responses from extractive companies arising in relation to the company – community conflict\(^5\).

Issues in Dispute

1. Social and cultural change:
   
   a. Population and demographics: e.g., migration, social inclusion, growth/decline of community/town, workers camps;
   
   b. Social infrastructure and services: e.g., housing; skills shortages/retention; health; education and training;
   
   c. Crime and social order: e.g., corruption, domestic violence, sexual violence, substance abuse and trafficking, prostitution; change in social norms;
   
   d. Community health and safety: e.g., disease; vehicle accidents; spills; controlled release; pollution; disruption of traditional food supply;
   
   e. Labor issues: e.g., health and safety; remuneration; freedom of association; discrimination;
   
   f. Security issues: e.g., behavior of security personnel (government, company, contractors); targeting/repression of activists; suppression of demonstrations;
   
   g. Culture and customs: e.g., breakdown of traditional roles; changing production/employment base; community cohesion; effects of the cash economy; ‘sense of place’; community leadership; cultural heritage;
   
   h. Vulnerable and marginalized groups: e.g., disproportionate or particular effects on women, children, disabled, elderly, ethnic minorities, indigenous peoples, artisanal and small-scale miners, etc.

2. Economic change:
   
   a. Distribution of benefits: e.g., employment; profit flows; royalties and taxes; training; procurement; supply chain; community development; compensation; managing expectations; equitable distribution (across state/regional/local/ethnic/class /family or other lines); effects of cash economy; technology transfer; corruption;

b. Inflation/deflation: e.g., housing (ownership/rents); food; access to social services;

c. Infrastructure: demands on/investment in roads, rail, ports, etc.

3. Socio-environmental change:

a. Pollution (source of or sink for): e.g., air (dust); water (acid and metalliferous drainage, cyanide, tailings seepage, riverine and submarine disposal); soil; noise; scenic amenity; vibration; radiation; traffic etc.

b. Resources (access to/competition over): e.g., land; water (groundwater, river, ocean); mineral resources; cultural heritage; forest resources; human; biodiversity;

c. Resettlement: e.g., consent and consultation in relation to relocation; compensation; ties/relationship to the land; equity; adequacy of resettlement housing and facilities; livelihoods

d. Disturbance: e.g., disruption (including exploration); consent and consultation in relation to land access; frequency and timing; compensation.

4. The Process of Change:

a. Consultation and communication: e.g., transparency; timing; inclusiveness; clear reporting; access to decision-makers; respect for customs and traditional authority structures;

b. Consent: e.g., sovereign consent (indigenous/FPIC or governmental); community consent (non-sovereign);

c. Participation: e.g., development of programs; monitoring; selection of alternatives and technologies; planning operational aspects;

d. Redress: e.g., dispute resolution; company-level grievance mechanisms; accessibility; transparency; dialog and engagement; third party mechanisms;

e. Agreements: e.g., equity; clarity of obligations; duress; capacity and governance; honoring commitments/performace; new corporate entity/transfer of responsibilities; cross-border projects; corruption;

f. Community development: e.g., participation; adequacy; appropriateness; capacity to deliver; prioritization; corruption.

Manifestations of Conflict

1. Procedure-based (generally non-violent)

a. Submissions: e.g., to government (national, state, regional, local) or company (local subsidiary or parent company); petitions;
b. Administrative proceedings: e.g., formal complaint through state-based or IFI mechanisms; other international bodies;

c. Litigation: e.g., claim brought in the jurisdiction where company operates; claim brought in the jurisdiction where parent company/majority shareholder is domiciled; class/group action; representative proceeding; injunction; damages;

d. Publicity: e.g., public meetings; use of media; campaigns; involvement of NGOs;

2. Physical protest (may be violent or non-violent):

   a. Demonstration: e.g., local/state/regional/national; involving mining personnel also or only (strike);

   b. Blockade: e.g., entry to the site; road; access route; the railway line; port.

3. Violence to property:

   a. Private property: e.g., damage or destruction of equipment/installations/buildings; interference with private infrastructure; small/large-scale;

   b. Public property: e.g., damage or destruction of equipment/installations/buildings; interference with public infrastructure; small/large-scale.

4. Violence to the person:

   a. Injuries: e.g., to community members; to company employees; involvement of company security forces; public safety forces (police or military);

   b. Deaths: e.g., of community members; of company employees; involvement of company security forces; public security forces (police or military).

**Types of Costs to Company**

1. Security

   a. Higher payments to state forces or company contractors;

   b. Increased operational costs of security: fences, patrols, escorts, transport, alarm/leak monitoring systems, reduced mobility;

   c. Increased security training and management: staff time lost production, cost of programs;

2. Project modification:

   a. Design modification costs: application; redesign; legal;
b. Additional works

3. Risk management:
   a. Insurance: higher premiums and coverage; risk rating; withdrawal of coverage;
   b. Legal and conflict expertise: specialist training for staff; additional staff;

4. Material damage:
   a. Damage or destruction to private property or infrastructure;
   b. Damage or destruction to public property or infrastructure;

5. Lost productivity:
   a. Operations discontinued: voluntary closure or enforced by injunction;
   b. Temporary shutdown of operations;
   c. Lost opportunity for future expansion and new projects;
   d. Disruption to production: delays, temporary or indefinite, absenteeism;
   e. Delays in deliveries/supplies;
   f. Greater regulatory burden/scrutiny;

6. Capital:
   a. Loss of value of the property: full write-off, other depreciation, sale at a loss, theft;
   b. Inability to repay debt or default on debt;
   c. Difficulty raising new capital;
   d. Share price instability/loss in value (within the relevant period);

7. Personnel:
   a. Staff time spent on risk and conflict management;
   b. Costs of remediation: mediators, meetings, negotiations;
   c. Hostage-taking: ransom payments, rescue operations, compensation;
   d. Arrests of staff;
   e. Injuries to employees and deaths;
   f. Low morale and stress-related effects;
   g. Retention: higher salaries, compensation packages, bonuses;
h. Recruitment: advertising positions, screening, interviewing, induction training;

8. Reputation:
   a. Higher expenditure on public relations: consultants, dissemination of information;
   b. Competitive loss/disadvantage: impact on brand, investor confidence;

9. Redress:
   a. Compensation (out of court payments);
   b. Fines;
   c. Increased social and environmental obligations: health care, education and training, provision of other services, clean-up and remediation costs;
   d. Costs of administrative proceedings or litigation: costs of operations themselves; judgment/settlement costs.

**Company Responses to Conflict**

1. Short-term response: containment and mitigation:
   a. Implementation of emergency response plan;
   b. Increased use of security personnel (government, company, contractor);
   c. Legal/administrative action against claimants, e.g., injunctions, counter-claims;
   d. Immediate remediation efforts: e.g., clean-up; treatment of affected individuals;

2. Dispute resolution:
   a. Participation in dialog with claimants after dispute has arisen (employees, community members, other stakeholders); convening community/public meetings; negotiations;
   b. Providing redress: e.g., undertakings; compensation (out of court payments); changes to existing agreements/arrangements;
   c. Financing expert/independent studies or audits: e.g., water/air/soil quality assessments, medical assessments, investigation of the recent conflict;
   d. Implementing recommendations of expert studies or audits: e.g., revision of internal policies;

3. Conflict management:
a. Development and implementation of a grievance mechanism;
b. Assignment of internal responsibility and budgeting for conflict management;
c. Development of policies, reporting, due diligence, cause analysis, and other systems to identify potential sources and impacts of conflict;
d. Recruitment and training of community relations personnel;
e. Training of security personnel.

Appendix 4.

Tools for success.

Community Group Participant Survey Example6.

Instructions: The questions below include both “check box” and “short answer” types. Please write your responses in the space provided. If more space is needed, please attach additional sheets of paper and indicate which question(s) you are responding.

Note that the term “Company” in this questionnaire refers to the company with which the good neighbor agreement (GNA) was negotiated.

Additional Documents. In addition to the survey, we are requesting copies of several documents if available. Providing these documents—especially the GNA itself—will significantly reduce the time and effort required to complete the questionnaire. Please consult the cover letter to see which documents we already have. The desired documents are:

- The signed GNA and any relevant supporting documentation (attachments, appendices, and/or agreements drafted pursuant to a provision in the GNA).
- Published articles about your GNA or which prominently feature your GNA (e.g., newspaper, newsletter, scientific journal, law review, editorials, etc.)
- Documentation of the GNA negotiation process itself (timeline, meeting minutes, progress reports, correspondence between community groups and company, etc.)
- Implementation documents or reports (e.g., results of GNA-mandated environmental audits).
- Internal or external GNA evaluation studies or reports.

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6 Adopted from EVALUATING THE USE OF GOOD NEIGHBOR AGREEMENTS FOR ENVIRONMENTAL AND COMMUNITY PROTECTION. August 2004 Douglas S. Kenney, Miriam Stohs, Jessica Chavez, Anne Fitzgerald Natural Resources Law Center. University of Colorado School of Law
- Breakdown of costs (for your group and the company, if known) relating to any aspect of negotiating and implementing the GNA.

- Environmental compliance data collected or received pursuant to the GNA.

- Material(s) describing your community group (size, goals, history, accomplishments, etc.).

We realize this is a lot of material on request, but this information is not available elsewhere. We will pay for photocopying and postage charges in addition to the $50 payment to cover your time.

You Contact Information:

1. Your name: _______

2. Your title/affiliation with community group: _______________________________

3. This is a ____ paid staff position ____ volunteer position.

4. Your mailing address: _________________________________________________ 

_____________________________________________________________________

5. Your phone number: ( ) _______ - _________

6. Your fax number: ( ) _______ - _________

7. Your email address: _______________________________

Note: At the end of the survey, you will have the option of requesting anonymity.

General Information about your Community Group

8. Name of group: ____________

9. Mailing address (only if different than question # 4): 

_____________________________________________________________________

10. Web site:

_____________________________________________________________________

11. Year founded: __________

12. Number of paid staff: _______

13. Annual operating budget (general estimate): $ ______________

14. Major source(s) of funding (check all that apply):

___ individual & member contributions ..(approximate percentage of total budget: ___%)}
__ government grants ...................... (approximate percentage of total budget: __%)
__ foundation grants ..................... (approximate percentage of total budget: __%)
__ the “Company” ........................... (approximate percentage of the total budget: __%)
__ other ........................................ (approximate percentage of the total budget: __%)

General Characteristics of the Company and the Community-Company Relationship

15. Approximately what year did “the Company” begin operations in your community?

__________

16. Approximately how many local residents does “the Company” employ?

______________

17. On a scale of 1 to 10, how important is “the Company” to the local economy? (1 = not important; 5 = moderately important; 10 = extremely important). ____________

18. On the same scale of 1 of 10, how important is the sector represented by “the Company” (e.g., mining, petrochemicals) to the local economy? __________________

19. At the time of GNA negotiation, “the Company” was: (check all that apply)

___ profitable (i.e., in “good” financial health)
___ expanding ___stable in size ___shrinking
___ seeking financing
___ privately owned ___ publicly traded ___don’t know
___ concerned about public opinion
___ perceived publicly as committed to environmental concerns

20. Is “the Company” currently a subsidiary of another company? ___ yes (name:_________________ )

___ no ___ don’t know

21. Who is the appropriate contact person(s) at “the Company” regarding the GNA? (Please provide one or more names, with complete contact information.)

________________________________

Incidents/Events That Led to the Negotiation of the GNA
22. Which of the following types of issues prompted community concern about “the Company”?

(Check all that apply. If more than one category is selected, please number them in order of significance; 1 = most significant, 2 = second most significant, etc.)

___ nuisance and quality of life issues (e.g., noise, traffic, odors)
___ local economic or fiscal issues (e.g., jobs, overburdened community services)
___ impacts on the environment (e.g., habitat loss, pollution)
___ public health concerns (e.g., toxic releases/spills, illnesses)
___ other (include as part of the description below)

Please describe the specific issue(s) of greatest concern:

________________________________________________________________________

23. What types of actions did your group take prior to negotiating the GNA? (Check all that apply.)

Working with Relevant Agencies and Governments:

___ participation in public hearings; commenting on public documents (e.g., EIS)
___ appeal of local, state or federal permit decision or other government action
___ urge regulatory agencies to better enforce existing laws/rules
___ urge agencies and/or other governmental bodies to adopt new rules or legislation
___ other related action (specify): ____________________________________________

Lawsuits:

___ lawsuit initiated by the community group
___ lawsuit initiated by another party but joined/supported by the community group
___ campaign/lobby for federal/state/local agency to bring suit against Company
___ other (specify): _______________________________________________________

Consultation with the Company:

___ written correspondence to Company expressing concerns
___ meeting(s) with Company representatives
___ other related action (specify): ____________________________________________
Publicity and Grassroots Activism:
___ negative publicity campaigns (media coverage, petitions, demonstrations, protests)
___ boycotts (of the “Company”)
___ support/oppose political candidates
___ other related action (specify):
__________________________________________

Any other types of actions (specify):
__________________________________________

24. What final event, or sequence of events, resulted in the decision to negotiate a GNA?
________________________________________________________________________

25. Who first raised the idea of negotiating a GNA? (If possible, please list the person by name, and indicate their affiliation and title.)
________________________________________________________________________

Participants in GNA Negotiation Process

26. In addition to “the Company,” who else was involved in the GNA negotiation?
___ your group
___ other citizen group(s) (Please list: ____________________________ )
___ union representatives
___ local government representatives
___ regulatory agency representatives (which agency: ____________________________ )
___ independent consultants or technical experts
___ members of the general public (not directly affiliated with the above parties)
___ others (please list: ____________________________ )

27. Please list the names, titles, and affiliations of the primary negotiators (for all participating interests):
28. In the GNA negotiations, did your group (and/or your partners, if any) have adequate access to:

- Lawyers & legal expertise ___ yes ___ no ___ don’t know
- Technical consultants ___ yes ___ no ___ don’t know
- Trained negotiators ___ yes ___ no ___ don’t know
- Technical/economic data ___ yes ___ no ___ don’t know

Interests of Parties in the GNA Negotiations

29. What were the specific commitments that the community group wanted from “the Company”? (Check all that apply. Note that these are the items “wanted,” not necessarily those achieved.)

- Specific Remediation and Mitigation Measures.
  ___ specific pollution prevention/reduction/remediation goals
  ___ traffic mitigation provisions
  ___ worker transportation/housing provisions
  ___ investments in local community
  ___ local hiring
  ___ job training
  ___ infrastructure improvements
  ___ contributions to local charities
  ___ other specific remediation and mitigation measures (describe): __________________

- Information, Audits, Inspections, and Monitoring.
  ___ commitment to perform regular environmental audits and/or monitoring
  ___ community access to relevant environmental data held by the Company
  ___ access to company accident prevention and response plan
  ___ whistleblower protections (for Company employees divulging information)
  ___ advance notice to the community of any proposed changes in operations

- Ongoing Role of Community Groups in Company Practices
___ active community involvement in audits, monitoring, and/or inspections
___ community group representation on Company planning, advisory and/or decision-making bodies
___ financial support of the community group named in the GNA
- Other Desired Commitments (describe):

30. What specific commitments did “the Company” want from the community group? (Check all that apply.)
___ dismissal of pending lawsuit
___ assurances that a lawsuit would not be filed
___ end protests or negative publicity
___ generate positive publicity for the Company
___ confidentiality agreement
___ other (specify):

31. If a regulatory agency of any kind took part in the negotiations, what was its interest and how did that affect the final agreement?

32. In your opinion, what was the primary reason that “the Company” agreed to negotiate a GNA?

33. Please list any issues discussed during the GNA negotiation process which were not incorporated into the final agreement:

Negotiation Costs
34. How long did the GNA negotiation process take, from the first meeting or correspondence suggesting a GNA to obtaining all required signatures of the final agreement? 

35. If possible, please estimate the total costs of negotiating the GNA:

$________ was spent by community group ( ___% or $_____ for consultants/outside experts) 

$________ was spent by company 

Please attach any data that further summarizes the costs and time demands of the negotiation process.

The Final Agreement

36. Do you believe the GNA is legally binding? ___ yes ___ no ___ unsure 

37. Is the GNA integrated with a state/federal regulatory action? ___ yes ___ no ___ don’t know 

If yes, please explain: 

38. If “the Company” is sold, will the GNA remain in effect? ___ yes ___ no ___ unsure 

If “the Company” has already changed ownership since the GNA was negotiated, please describe the change of ownership, listing past and current owners and any relevant dates: 

39. Does “the Company” provide funding to your community group to ensure its continued participation in GNA-related activities? ___ yes ___ no. If yes, how much per year: $ ____________ 

Implementation of the GNA 

40. Overall on a scale of 1 to 10, to what extent have the commitments listed in the GNA been honored, or are on schedule to be honored? (1 = not at all; 10 = everything implemented as planned). _____

41. Please describe any problems encountered in the implementation process:

42. Have any subsequent modifications been made to the original GNA? ___ yes ___ no 

If so, please describe (include any provisions that have been deleted or abandoned): 
________
43. Does the GNA include specific procedures for dispute resolution? ___ yes ___ no
How have implementation disputes been resolved?

44. If possible, please estimate the total costs (thus far) of implementing the GNA?
$________ spent by community group (___% or $_____ for consultants/outside experts)
$________ spent by “the Company”

45. If possible, please estimate expected future costs of implementing the GNA?
$________ to be spent by community group (___% or $_____ for consultants/outside experts)
$________ to be spent by “the company”

Lessons Learned and General Impressions:

46. If similar disputes with this or a different company were to arise in the future, would negotiating another GNA be your preferred course of action? ___ yes ___ no ___ unsure
If no, what would you do instead?

47. If you had the chance to negotiate the GNA over again, what would you do differently regarding ….
- … the negotiation process?
- … the structure of the agreement?
- … the specific content of the agreement?

48. Were there any unexpected benefits to your group and/or community resulting from this whole
experience?

49. Please rate the overall “success” of your GNA on a scale of 1 to 10: _____
   (1 = total disappointment; 10 = a complete success)

50. What, if any, concerns do you have about the viability of your community group to
   monitor the GNA and/or ensure its commitments under the GNA over the term of the agreement?

51. Any final advice to other community groups considering use of a GNA?

52. Is there anything important about your GNA that we failed to ask about? If yes, please tell us now:

Thank you very much for your time!

Confidentiality. It is our preference to list your name as an interview subject and to give you credit for the answers provided. Before publication, you will be given the opportunity to review and correct any case study write-ups about your GNA effort. Nonetheless, you can remain confidential if desired.

Can we use your name in project publications? ___yes ___no

Payment. We are happy to provide you with $50 in thanks for your efforts. Unless you provide an alternate address below or indicate another recipient, we will address and send the check to the person and address listed in questions 1-6.

Please provide a rough estimate of your copying and mailing expenses (if any): $ ______

Alternative address and/or recipient (only if applicable): __________________________

Thanks again for your assistance. You will, of course, be provided with the results when available.

RETURN TO. Use the envelope provided or mail.

**Outline Terms of Reference for Stakeholder Analysis**

1. Background [Background Text]

2. Objectives and Scope of the Work
The principal objective of the assignment is to conduct a stakeholder analysis, in order to inform the design and implementation of a labour program associated with the {….}.

Stakeholders are groups or institutions that may be affected by or influence the design, implementation and outcomes of labour restructuring and PPI more broadly. Although the workforce is of particular interest, the analysis will look wider than workers alone, and consider all stakeholders involved in the reform of [PPI Scheme name].

The principal stakeholder groups will include representatives of:

Employees
Trade unions and worker representatives
Government
Potential investors
Customers and users of PPI services.

[Client Name], to whom the consultant will report, will be the client.

[The timing and scope of this work may be coordinated with the design of an engagement and communications program because the stakeholder analysis will be an important input to an engagement plan].

3. Deliverables

The outputs of this consultancy will be:

A draft report that will be circulated for comment
A presentation (workshop / seminar) summarizing the findings
A final report which takes into account any comments and suggestions from the presentation

4. Consultant Tasks

The stakeholder analysis will involve the following tasks.

**Task 1:** Examine relevant available secondary documentation about the PPI scheme and the processes and experiences of any previous PPI schemes (particularly the history of relationships with key stakeholder groups – positive or negative). This documentation may include:

Reports commissioned by Government
Informal enterprise or PPI scheme level information
Press and newspaper articles
Trade union policy and position papers, web sites or campaign materials

Other socio-economic assessments and reports for example NGO reports, poverty reports prepared under Poverty Reduction Strategies, UN Human Development reports; impact studies on structural adjustment or civil service reform prepared by international development and financing institutions, ILO reports.

Illustrative Stakeholder Map

<table>
<thead>
<tr>
<th>Influence of Stakeholder</th>
<th>Importance of Stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td></td>
<td>Little/No Importance</td>
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<tr>
<td></td>
<td>Some Importance</td>
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<tr>
<td></td>
<td>Significant Importance</td>
</tr>
<tr>
<td>Significant Influence</td>
<td>C</td>
</tr>
<tr>
<td>Somewhat Influential</td>
<td>A</td>
</tr>
<tr>
<td>Little/No Influence</td>
<td>D</td>
</tr>
<tr>
<td>Unknown</td>
<td>B</td>
</tr>
</tbody>
</table>

Boxes A, B and C are the key stakeholders of the project. The implications of each Box are summarized here:

Box A: Stakeholders appear to have a high degree of influence on the PPI scheme, who are also of high importance for its success. This implies that the government implementing agency will need to construct good working relationships with these stakeholders, to ensure an effective coalition of support for the project. Examples might be the senior officials and politicians (minister, prime minister) or trade unions.

Box B: Stakeholders of high importance to the success of the PPI scheme, but with low influence. This implies that they will require special initiatives if their interests are to be protected. An example may be relatively poor people for whom improved access to
special low tariffs water or electricity would have a large social impact, but who have little “voice.”

Box C: Stakeholders with high influence, who can, therefore, affect the project outcomes, but whose interests are not necessarily aligned with the overall goals of the PPI scheme. This conclusion implies that these stakeholders may be a source of significant risk, and they will need careful monitoring and management.

Box D: Stakeholders in this Box, with low influence on, or importance to PPI scheme objectives may require limited monitoring or evaluation, but are of low priority.

(Source: Adapted from DFID, 1993)

Task 2: Design, plan, and gain agreement on a stakeholder analysis methodology with [Client Name] and key Government officials. Obtain the views of this group on:

- Overall objectives and goals of the PPI scheme
- Critical stakeholders within the political system (including parliamentary committees) and the Government (national and local level), the enterprise (workers and managers) and existing interface between Governments with civil society (including unions, regulators)
- Key issues for stakeholder identification and analysis
- Current levels of engagement and interface between government, enterprise, workers, unions and end-users (customers)

The most vulnerable groups among the poor and potential mechanisms to include their voices and perceptions are heard during the stakeholder analysis and make sure they are not overlooked.

Their views regarding civil society representation and participation.

Task 3: Undertake a stakeholder assessment which:

Identifies primary, secondary and key stakeholders, where:

- primary stakeholders are those ultimately affected by the PPI, either positively (e.g. consumers and other beneficiaries) or negatively (e.g. retrenched workers and managers);
- secondary stakeholders are intermediaries in the reform process;
- key stakeholders are those who can significantly influence the PPI scheme, or who are important to the success or failure of the PPI scheme
Maps the stakeholders, showing their degree of importance and influence (see Illustrative Stakeholder Map above). An analysis identifying key concerns of each stakeholder group will also be highly relevant.

Provides clear information on the concerns and interests of each of the key stakeholder groups.

**Task 4**: Conduct interviews or focus group discussions with a wide range of potential actors, including [as set out in the plan agreed during Task 2]:

Government, including:
- Key officials involved in the PPI process
- Key officials responsible for the sector
- Relevant politicians
- Managers in the regulatory agency for the sector (if any)
- PPI / enterprise managers
- National employment service staff
- Advisers to Government, including:
  - Advisers engaged in all aspects of the PPI program
  - Communications and engagement advisers to Government (these may be located in a range of agencies)
- Employees of the affected enterprise, including:
  - Senior and middle management
  - Workers and their families
- Civil society groups:
  - Trade union representatives (national and local)
  - Workers Association or works council representatives
  - NGOs with an active interest in the sector or PPI processes
  - Business Development Support Agencies
  - Media representatives and journalists [as appropriate and with the prior approval of the implementing agency]
- Private Sector Agents including:
  - Formal and informal private sector associations
Related businesses in the sector
Suppliers to the PPI scheme / enterprise
Private sector placement and job search agencies
Customers relevant to PPI, including:
Major industrial customers
Domestic and small business customers
Government customers
Poor users, including those currently unable to afford connection or full tariffs (for say water or power)
Potential investors (as far as this is practical, given the timing of the PPI process, and the fact that some investors may be foreign direct investors based overseas).

**Task 5:** Assess the [Likely] Characteristics of Retrenched Workers

[This work may not be necessary if a worker survey has already been undertaken or is underway].

The consultants will:

Assess the profile of workers to be retrenched (age, educational characteristics, skills, years of service)

Develop illustrative “profiles” of different groups of workers

**Task 6:** Advise the [Client Name] on:

The key stakeholders and their concerns

Any important sub-groups and (if appropriate) individuals

Options for [Client Name] and Government to respond to stakeholder concerns, paying particular attention to concerns that may risk the delay, postponement or cancellation of the PPI scheme

Recommended or preferred options, strategies and tactics for Government that reflect stakeholder concerns and Governments overall objectives for PPI

High-level “messages” to be considered during the detailed design of a communications and engagement plan.

**Timeline**
The stakeholder analysis will take xxx weeks [suggested minimum four weeks] for completion, from initial research of secondary sources to finalization of the document after incorporating comments from the seminar.

**Consultant Profile**

The consultant undertaking the stakeholder analysis will have previous experience with stakeholder analysis, social, business and investment analysis, ideally in an economic reform context. The consultant will have good analytical and writing skills and will have previous experience in facilitating and conducting focus group discussions and interviews.

Reference:


**Stakeholder Analysis: Work Sheets**

Steps 1, 2, and 3 of Stakeholder Analysis:

Identification of Stakeholder Groups, Their Interests, Importance, and Influence

<table>
<thead>
<tr>
<th>Stakeholder Groups</th>
<th>Interest(s) at Stake in Relation to Program</th>
<th>Effect of the Program on Interest(s)</th>
<th>Importance of Stakeholder for Success of Project</th>
<th>Degree of Influence of Stakeholder over Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>+</td>
<td>U – Unknown 1 – Little/No Importance</td>
<td>U – Unknown 1 – Little/No Influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>1 – Some Importance</td>
<td>2 – Some Influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 – Moderate Importance</td>
<td>3 – Moderate Influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 – Very Important</td>
<td>4 – Significant Influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 – Crucial Player</td>
<td>5 – Crucial Player</td>
</tr>
</tbody>
</table>
Step 3 of Stakeholder Analysis (continued):

Mapping Key Stakeholders’ Relative Influence and Importance

<table>
<thead>
<tr>
<th>INFLUENCE OF STAKEHOLDER</th>
<th>IMPORTANCE OF ACTIVITY TO STAKEHOLDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Little/No Influence</td>
<td>Little/No Importance</td>
</tr>
<tr>
<td></td>
<td>Some Importance</td>
</tr>
<tr>
<td></td>
<td>Moderate Importance</td>
</tr>
<tr>
<td></td>
<td>Much Importance</td>
</tr>
<tr>
<td></td>
<td>Critical Player</td>
</tr>
</tbody>
</table>
Step 4 of Stakeholder Analysis:

Formulation of Stakeholder Participation Strategy

<table>
<thead>
<tr>
<th>STAGE IN PROJECT PROCESS</th>
<th>TYPE OF PARTICIPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Communication (one-way flow)</td>
</tr>
<tr>
<td></td>
<td>Consultation (two-way flow)</td>
</tr>
<tr>
<td></td>
<td>Negotiation (increasing control over decision-making)</td>
</tr>
<tr>
<td></td>
<td>Participation (transfer of control over decisions and resources)</td>
</tr>
</tbody>
</table>

Note: Insert key stakeholders in the appropriate cell.

Note: Insert into the table specific participation strategy (ies) for key stakeholders (such as information campaign for general public; workshop with ministry and NGOs; or focus group meetings with workers).
Check Lists for Preparing and Costing a Communications and Engagement Program

A) Media Audit

Some Initial Questions for a Media Audit

Cost information needs to be based on an understanding of the media channels. The following issues can help determine communications strategies, approaches, and the amounts that need to be budgeted for in a communications and engagement program.

General questions relating to all media

What is their ownership? Private or state-owned?

To what extent are they controlled (a government or a business mouthpiece), or seen as editorially independent? Do they have an identifiable political or policy stance? Are they a trusted source of accurate information?

To what extent are they relevant to workforce restructuring and PPI?

Do they have an identifiable political or policy stance? Are they a trusted source of accurate information?

Can adverse media coverage be “bought” for a price by opponents of PPI?

What are the costs of paid-for advertising, announcements, advertorials, inserts (newspapers)

What is the likely degree of interest in factual material (policy papers, video documentary, press releases) for reporting and unpaid editorial?

Radio & TV

Percentage of population owning a radio / listening to a radio? Coverage (geographic / ethnic group)

How many radio stations operate? What languages? Are there any areas / regions / groups not covered?

Which are the most popular programs / personalities? Which are most relevant to workforce restructuring?

Newspapers and Press; other Channels
Circulation figures / typical readership profile / price / frequency / geographic coverage / languages

Main style (news, business, sport, magazine) and main audience (elite, popular, urban, rural)

What are the main information and communication networks within the enterprise (company newsletters, management meetings, notice boards, opinion leaders, trade unions meetings, union newsletters; informal and after-work networks and meeting places)

Where else do people find information (tea or coffee shops, bars or beer halls; cinemas; weekly markets, religious meetings?)

Who uses internet, email, telephone, text messaging and other forms of communication?

Who are key opinion formers outside of TV / radio / press? Role of international trade union federations think –tanks, professional associations, traditional leaders and authorities and other NGOs?

B) Checklist of Potential Costs

<table>
<thead>
<tr>
<th>OVERHEADS &amp; ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office facilities</td>
</tr>
<tr>
<td>Rent, office equipment, office running costs, transport</td>
</tr>
<tr>
<td>Salary of Adviser in PPI office</td>
</tr>
<tr>
<td>Salary and related costs</td>
</tr>
<tr>
<td>Consultant’s fees</td>
</tr>
<tr>
<td>Fee rate (local, international) and per diems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters</td>
</tr>
<tr>
<td>Printing costs (size, colors, production run)</td>
</tr>
<tr>
<td>Display costs (depends on locations)</td>
</tr>
<tr>
<td>Newspapers</td>
</tr>
<tr>
<td>Advertising costs</td>
</tr>
<tr>
<td>Advertorial costs</td>
</tr>
<tr>
<td>Workshops &amp; conferences</td>
</tr>
<tr>
<td>Venue; 24 hour rate; travel costs; presentation facilities</td>
</tr>
<tr>
<td>Press briefing packs</td>
</tr>
<tr>
<td>Media Type</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Video</td>
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<tr>
<td>TV</td>
</tr>
<tr>
<td>Radio</td>
</tr>
<tr>
<td>In-house newsletter</td>
</tr>
<tr>
<td>Web site (for redeployment)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Venues for meetings</td>
</tr>
</tbody>
</table>

### CONSULTATION

<table>
<thead>
<tr>
<th>Activity</th>
<th>Costs Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venues</td>
<td>Number of events, costs of venue; 12 or 24 hour rate; travel costs; presentation facilities</td>
</tr>
<tr>
<td>Policy papers</td>
<td>Commissioning costs</td>
</tr>
<tr>
<td></td>
<td>Preparation costs</td>
</tr>
<tr>
<td></td>
<td>Printing and dissemination costs</td>
</tr>
</tbody>
</table>

### NEGOTIATION

<table>
<thead>
<tr>
<th>Activity</th>
<th>Costs Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venues</td>
<td>Costs of venue; 24 hour rate; travel costs; presentation facilities</td>
</tr>
<tr>
<td>Workshops &amp; conferences</td>
<td>Venue; 24 hour rate; travel costs; presentation facilities</td>
</tr>
</tbody>
</table>
COOPERATION

<table>
<thead>
<tr>
<th>Workshops &amp; conferences</th>
<th>Venue; 24 hour rate; travel costs; presentation facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building for engagement partners</td>
<td>Training costs</td>
</tr>
<tr>
<td>Reporting</td>
<td>Costs of annual reports</td>
</tr>
</tbody>
</table>

Note – all costs to include local taxes.

Appendix 5.

List of the GNA case studies examples

The 11 cases cover 13 GNAs (since the 3 Seneca-Babcock industries are treated as one case). Additionally, some of our advisors and members of our GNA network have the experience with multiple cases, which undoubtedly increases the value of their opinions and insights.

- Bowie Resources & Western Slope Environmental Resource Council (WSERC). (Paonia, Colorado.) The GNA is primarily designed to limit truck and rail traffic and noise associated with increased production at a coal mine. The GNA, adopted in 2000, was an outgrowth of a federal coal permit challenge that threatened to delay mine expansion for several years. The GNA provided the community with a mechanism for addressing the traffic issues—that was not covered in the EIS—and allowed the company to move forward quickly with expansion.

- Chevron Refinery & West County Toxics Coalition (WCTC), Communities for a Better Environment (CBE), and People Do!. (Richmond, California.) The GNA was inspired by a variety of public health and nuisance concerns associated with pollution discharges and Clean Air Act violations from the Chevron refinery. When the refinery sought a state air

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7 Kenney at all, EVALUATING THE USE OF GOOD NEIGHBOR AGREEMENTS FOR ENVIRONMENTAL AND COMMUNITY PROTECTION. 2004.
quality permit to (ironically) start manufacturing new “clean fuels,” a permit challenge was initiated, prompting GNA negotiations leading to adoption of an agreement in 1992 calling for reduced pollution, increased monitoring, and investments in the local economy.

- Rhone-Poulenc & Texans United Education Fund (TUEF). (Manchester-Houston, Texas.) The GNA addresses the community’s public health and nuisance (odors, noise, traffic) concerns associated with emissions from a chemical plant. A significant chemical spill and a pending permit mobilized the community to seek the GNA, which was adopted in 1992 as part of the permit issued by the Texas Water Commission.

- Rohm and Haas & Ohio Citizen Action (OCA) and Environmental Community Organization. (Cincinnati, Ohio.) The agreement addresses air quality and noise issues associated with a chemical plant. In response to public pressures resulting from an aggressive canvassing and media strategy, the company agreed in 1991 to an informal and non-binding agreement that addresses the public health and nuisance concerns through a Community Advisory Council.

- Seneca-Babcock industries (PVS Chemicals, BOC Gases, and Natural Environmental, Inc.) & Buffalo Common Council and Seneca Babcock Environmental Subcommittee (SBESC). (Buffalo, New York.) The GNA is a series of three agreements addressing a variety of environmental, public health, and nuisance concerns associated with three chemical companies. Bad publicity (in part due to spills) and governmental pressure prompted negotiations leading to agreements signed in 1995-1997 focusing on pollution prevention, community notification, and involvement, and public health and safety.

- Shell Oil & Concerned Citizens of Norco (CCN). (Norco, Louisiana.) The GNA is the culmination of a lengthy and bitter fight concerning public health and nuisance impacts experienced by families living adjacent to a refinery and a chemical plant. The agreement promises funds to relocate the most affected individuals.

- Stillwater Mining Company & Northern Plains Resource Council (NPRC), Stillwater Protective Association, and Cottonwood Resource Council. (Billings, Montana.) The
GNA addresses concerns relating to environmental protection and the community impacts of new workers being brought in to increase production at a palladium mine. Community groups used pending permits and threatened lawsuits together with a negative publicity campaign to force a negotiated agreement in 2000 that addresses key community concerns while allowing mine operations/expansion to proceed. (See Appendix C for a detailed discussion.)

- Sun Oil & Community/Labor Refinery Tracking Committee (C/LRTC) and the City of Philadelphia. (Philadelphia, Pennsylvania.) The GNA addresses public health and quality of life issues associated with sulfur dioxide emissions from a refinery. Negotiation and adoption of the GNA derived from a lawsuit inspired by Clean Air Act violations. The GNA was enacted in 1997 as a consent decree to the lawsuit, which has since expired.

- Syntex Chemicals & Boulder Residents for the Elimination of Air Toxics and Hazardous Emissions (BREATHE). (Boulder, Colorado.) The GNA mitigates the public health and nuisance impacts of air emissions from a pharmaceutical company. The agreement, initiated by the company and adopted in 1995, was inspired by high emissions reported in the Toxic Release Inventory and by threats to citizens and local government to block needed building permits for a proposed expansion.

- Unocal & Shoreline Environmental Alliance (SEA), Communities for a Better Environment, and the Crocket/Rodeo Coalition. (Crocket/Rodeo, California.) The GNA addresses public health concerns associated with chemical releases from a refinery. Several highly dangerous spills/releases prompted citizens to challenge the refinery’s expansion permits, leading to negotiations that culminated in the agreement in 1995.

- Idaho Dairies & Citizens of Owyhee County Organized Association (COCOA). (Marsing, Idaho). The GNA addresses the impacts on water and air quality associated with large-scale dairy operations, particularly the disposal of manure. Negotiations were prompted by a citizen challenge of a water permit needed by the dairy. The GNA, signed in 1998, is included in the state water permit. Originally the GNA applied to only one dairy but was later extended to a second dairy owned by the same operator.
Appendix 6.

Draft Mining Corporate Policy on Operations Native American Lands.
(Prepared by Julie Cavanaugh-Bill. The Te-Moak Tribe of Western Shoshone).

[Corporate Name] recognizes the importance of the land, resources and traditional territories to Native American (“indigenous”) communities. We recognize that current U.S. laws and policies are under scrutiny by the Inter American Commission on Human Rights and the United Nations Committee on the Elimination of Racial Discrimination for failure to uphold fundamental human rights of indigenous peoples in the United States. We recognize that mineral development must contribute to the benefit of all parties involved. Accordingly, [Corporate Name] has adopted the following policy to guide our company’s operations on traditional Native American lands and interactions with indigenous peoples in the United States.

Maintenance of Cultural and Spiritual Integrity of Indigenous Lands:

- [Corporate Name] Mining will recognize in all phases of Company activities the spiritual, historical, linguistic, health and cultural interconnection of indigenous peoples and their traditional territories and their respect for the sacredness of (L.A.W.S.):
  - L-land,
  - A-air,
  - W-water and
  - S-sun/spirit;

- [Corporate Name] Mining will work in good faith with indigenous communities to develop and adopt measures to protect water quality at all stages of mining, including exploration and reclamation stages, to address the impact of dewatering and to address the use of cyanide;

- [Corporate Name] Mining will work in good faith with indigenous communities to develop and adopt measures to protect air quality, including in particular, the emission of mercury;

- [Corporate Name] Mining respects and will comply with indigenous peoples’ right to free, prior and informed consent to new activities or expansions, this includes the right of the affected indigenous community(ies) to say no to a project that would threaten...
areas of cultural and spiritual significance;

- [Corporate Name] Mining will develop a mutually acceptable agreement with indigenous community(ies) on how to handle cultural resources before, during and after mining operations and compensation to assist those communities in preserving and strengthening its cultural resources;

Recognition and Compliance with Native American Land Claims, Treaties and other Agreements:

- [Corporate Name] Mining respects fully Native American rights to ancestral lands and recognizes that treaties and other agreements remain a core focus of Native American interests, concerns and aspirations. [Corporate Name] is committed to recognizing and complying with all Treaties and other Agreements concerning lands areas where operations exist or are proposed.

Accountability and Transparency of Corporate Activities:

- [Corporate Name] Mining hereby adopts a public policy commitment to refrain from any legislative or other governmental relations with or toward the U.S. government for the privatization and sale of Western Shoshone or other known-indigenous traditional territories to [Corporate Name] Mining or other members of the mining industry or affiliated individuals, organizations, or entities;

- [Corporate Name] Mining will establish indigenous advisory committees (chosen freely by the communities themselves) to discuss issues of concern, share information, and include the communities in decision-making on water, land, air and other key issues;

- [Corporate Name] Mining will allow transparency with regard to information on environmental and social impacts of its operations on indigenous communities, resources, lands, water and air; and

- [Corporate Name] Mining will allow access to its operations for indigenous communities.

Economic and Community Development, User Fees and Royalties:

- Notwithstanding other agreements between [Corporate Name] Mining and indigenous communities; where treaties or other agreements between the U.S. government and Native American Nations exist and include provision for fair
compensation or other payments or royalties, those provisions will be respected and [Corporate Name] Mining will initiate mechanisms either through revenue sharing or otherwise;

- [Corporate Name] Mining will support local indigenous communities in their efforts to provide community development and social programs;
- [Corporate Name] Mining will work with interested local indigenous communities and educational institutions to support their efforts to develop knowledge and upgrade skills that will prepare community members for employment in the [Corporate Name] Mining projects;
- [Corporate Name] Mining will ensure participation of interested indigenous people by providing training and employment opportunities et al. stages of mineral activity and by creating a working environment that encourages the participation of qualified Native American people et al. levels of the company;
- [Corporate Name] Mining will working with local Native American communities in the development of business opportunities, including joint venture work;
- [Corporate Name] Mining will implement a youth scholarship program for interested communities and [Corporate Name] Mining will provide cross-cultural training programs for Native American and non-Native employees.
Appendix 7.

Notice of Acknowledgment.

Notice of Acknowledgement
FWA00002306

Date: February 24, 2014
To: Alexandra Masaitis

Protocol Number for IRB: 2014E067
Protocol Title: Conflict Resolution in Mining Development Using good Neighbor Agreement
Type of Review: Exemption Category #2
Review Date: February 24, 2014
Anniversary Date: February 24, 2015
Approval Period: February 24, 2014 to February 24, 2017

This approval is for:
Approved number of subjects: 200
Approved documents: Application for Exempt Review dated 02/12/2014;

Please note the federal government has identified certain categories of research involving human subjects that qualify for exemption from federal regulations. The IRB is authorized by the federal government to determine whether studies thought by the principal investigator (PI) to be exempt from federal regulations actually qualify for exemption. Only the IRB has authority to make a determination that a study is exempt from federal regulations and from IRB review and approval. The above-referenced protocol was reviewed and the research deemed eligible to proceed in accordance with the requirements of the Code of Federal Regulations on the Protection of Human Subjects (45 CFR 46.101 paragraph [b]).

Reference the protocol number on all related correspondence with the IRB. If you have any questions, please contact us at 775.327.2368.