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Conflict over the Sustainability of Copper Mining: Experiences from MI & WI

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Abstract

The Upper Peninsula of Michigan and northern Wisconsin are home to a number of small but high-grade copper and other metallic ore bodies. Efforts to develop these ore bodies have been slow with only one completed mine in Wisconsin (Flambeau) and one new project in the Upper Peninsula (Eagle). Mining is not a new activity to the area. One might expect that in a region with a rich mining past and a need for jobs mining investment would be welcomed. Yet, any effort to develop a new mine is met with strong protests and well-organized resistance. Some stakeholders feel that metallic mining is unsustainable and is not worth the risk it presents to the community despite the assurances of the mining companies. It has been particularly difficult for the mining companies to communicate their commitment to sustainable mining to these stakeholders.

The paper looks at the dialogue that develops between the interested stakeholders about a potential new mine in the region, especially between the interested mining company and those opposed to a new mine. The cases of Flambeau, Crandon, and Eagle projects are examined. The method of discourse communities and discourse analysis based on the case of the Eagle Project is used to provide insights into the themes, identities, and boundaries set by the different stakeholders. The results provide information on what the important dialogue issues are, how the mining companies tried to communicate their responses to these issues, how successful the communication efforts were, and what might be done to improve communication and perceptions about the sustainability of the mining effort.



1 Introduction

The Upper Peninsula (UP) of Michigan and northern Wisconsin are home to a number of small but high-grade copper and other metallic ore bodies. Efforts to develop these ore bodies have been slow with only one completed mine in Wisconsin (Flambeau) and one new project in the UP (Eagle). Mining is not a new activity to the area, especially the UP. The UP was historically a major copper and iron mining region and today still has two large iron ore mines. Northern Wisconsin has less of a mining past, but the state as a whole has been previously involved with metallic mining. Today, the region depends on tourism, outdoor recreation, and lumbering for much of its economic base. One might expect that in a region with a rich mining past and a need for jobs mining investment would be welcomed. Yet, any effort to develop a new mine in the region is met with strong protests and well-organized resistance. Some local and regional stakeholders feel that local metallic mining is unsustainable and is not worth the risk it presents to the community despite the assurances of the mining companies. It has been particularly difficult for the mining companies to communicate their commitment to sustainable mining to these stakeholders, and many in the local and regional community have remained resistant, and openly hostile, to any efforts to obtain necessary mining permits.

The paper looks at the dialogue that develops between the interested stakeholders in a potential new mine in the region, especially between the interested mining company and those opposed to a new mine. The method of discourse communities and discourse analysis is used to provide insights into the themes, identities, and boundaries set by each community. The cases of Flambeau, Crandon, and Eagle are examined [1]. The results provide information on what the important dialogue issues are, how the mining companies tried to communicate their responses to these issues, how successful the communication efforts were, and what might be done to improve communication and perceptions about the sustainability of the mining effort.

2 Case Studies

2.1 Flambeau Mine

The Flambeau mine is on a 181-acre site near Ladysmith, Wisconsin. The mine site comes under the local government jurisdictions of the city of Ladysmith, town of Grant, and Rusk County. The site is within 140 feet of the Flambeau River (hence its name), and the close proximity of the river caused considerable concern about the mine site. Kennecott (through its subsidiary Great Lakes Exploration Company) began exploration of the site in 1968. Kennecott began the permitting process in 1974 as required under the Metallic Mining Reclamation Act that was the law in effect at the time in Wisconsin. The Flambeau mine was the first (and only) metallic mine permitted under this Act. The original plan was for an 11-year operation that involved both surface and underground mining. When concerns raised by Rusk County officials were not addressed, they banned sulfide mining



through a zoning ordinance. This ban along with low metal prices ended the first permitting attempt in 1976. Kennecott returned to the permitting effort for a much more scaled-down project in 1987 (as Flambeau Mining Company). Despite years of strong opposition to the mine, the necessary permits were obtained in 1991, and mining began in 1993. The mine operated for four years (until 1997). The ore averaged 10 % copper. The small amounts of high-grade ore allowed Kennecott to ship the ore to Canada for processing. The mining operations produced 181,000 tonnes of copper, 3.3 million ounces of silver, and 334,000 ounces of gold. Reclamation is ongoing with a certificate of completion obtained for the non-developed section of the mine site.

The initial opposition to the Flambeau permitting effort came from the Lac Courte Oreilles Ojibwa and the John Muir Chapter of the Sierra Club of Madison, Wisconsin. Local resident opposition also led to the formation of the Rusk County Citizens Action Group. A joint Native American rights-environmental concern organization, Northern Thunder, and a regional environment concern group, Wisconsin Resources Protection Council, were also very active against the permitting of the mine. Several noted regional activists began their activities here. One is given credit for starting the movement that led to the approval of the Mining Moratorium Law of Wisconsin (1997) that effectively ended efforts to permit sulfide metallic ore bodies in Wisconsin because of its strict requirements.

2.2 Proposed Crandon Mine

The proposed mine site borders on the Mole Lake Sokaogon Chippewa Reservation and the Wolf River in northeast Wisconsin near Crandon. Exxon Coal and Minerals Company began exploring the area in 1969 and announced the discovery of the estimated 55-60 million tonnes ore body in 1976. The ore consists of two types of mineralization that each roughly account for half of the total ore body. The massive ore mineralization is a significant source of zinc (9.8 %), and the stringer ore mineralization is a high-grade source of copper (1.7 %). Small amounts of lead, silver, and gold are also present. The project plan was to develop a mine that operated at 5500 tonnes per day over 28 years. Exxon began the permitting effort in 1980. Exxon withdrew its initial permit application in 1986 after metal prices declined. Efforts to obtain a permit were started again in 1994 by Crandon Mining Company (jointly owned by Exxon and Rio Algom). Rio Algom bought out Exxon's interests in 1998 and renamed the company Nicolet Minerals Company. In 2000, Billiton bought Rio Algom, and Nicolet Minerals Company became part of BHP Billiton in 2001. BHP Billiton put the proposed mine site up for sale in 2002. The property was bought by Northern Resource Group in April 2003. Later in 2003, the Mole Lake Ojibwa and Forest County Potawatomi Tribes bought the mine site and surrounding lands from Northern Resource Group and ended the current efforts to develop its mineral resources.

Local opposition to the Crandon project was led by the Native American community. The Mole Lake Reservation of the Sokaogon Ojibwa borders the mine site, and other reservations are in the



immediate area. An existing coalition of Native American tribes and non-Native American activists created to address Native American sovereignty issues (an issue that became highly contentious in Wisconsin over spear-fishing) called the Midwest Treaty Network came out in opposition to the mine. The decision by the US Environmental Protection Agency that Native American reservations have the authority to set stricter environmental standards like states (upheld by the courts in 1999) effectively ended efforts to permit the mine. The nearby Native American communities were able to buy the reduced-valued site with casino money in 2003 and end any immediate efforts to mine the site. The Native American efforts were less significant at the Flambeau site because there was no reservation in the immediate area.

2.3 Eagle Project

Kennecott Minerals Corporation is proposing the underground mining of a small (4 million tonnes) but high-grade sulfide nickel (3.6 %)-copper (3 %) ore body in the north central UP of Michigan. The project called Eagle is near Big Bay north of Marquette. First proposed in 2004, the mine is expected to be in operation for six to eight years. Kennecott plans to concentrate the ore in the area at an old, existing iron ore facility and ship the material to another site in Canada for processing. The project site lies in the Yellow Dog Plains on the Salmon Trout River near Lake Superior. The Salmon Trout River is believed to be the only remaining site in Michigan for the natural breeding of coaster brook trout although natural breeding does occur in nearby states. The private Huron Mountain Club owns 20,000 undeveloped acres nearby. The Keweenaw Bay Indian Community (KBIC) of Baraga claims Ojibwa Ceded Territories rights for the area. The Ojibwa ceded the western Upper Peninsula and its mineral values to the US government in the Treaty of 1842. The treaty preserved the Ojibwa's rights to hunt, to fish, and gather on the ceded lands. Similar treaties did the same for areas of northern Wisconsin.

The State of Michigan has primary regulatory responsibility for permitting the Eagle Project. Under Michigan's Nonferrous Metallic Mining Regulations (which Kennecott and a host of other stakeholders were involved in developing), Kennecott must obtain three permits (air quality, water discharge, and mining) from the Michigan Department of Environment Quality (likely to be merged with the Department of Natural Resources in 2010). Since Kennecott wants to enter the ore body from a site on state public lands for technical reasons, a long-term lease had to be obtained from Michigan Department of Natural Resources. The required State of Michigan permit applications were submitted in February 2006 and received final approval in 2008. The lease from the Department of Natural Resources was also approved. The permits and lease are still under court challenges from opponents. In addition, some of the proposed mining activity requires a permit from the US Environmental Protection Agency under the Underground Injection Control Program. The EPA permit was still being considered in fall 2009 due to a request for more information. Currently, Kennecott has a hold on the project because of low metal prices but is still moving ahead with the legal requirements.



Like with the Flambeau mine, the Native American community is not leading the opposition against the Eagle Project. The KBIC is adamantly opposed to the mine, but the distance from the community in Baraga and the limited interests KBIC has in the immediate area limits its impact. Ceded Rights are well supported by the courts but where they apply is much less clear. The leadership has come from local activists (Save the Wild UP) and national groups (National Wildlife Federation) concerned with the environment. There are also active special interest stakeholders in the discussion like Trout Unlimited (the coaster brook trout and the Salmon Trout River) and the Huron Mountain Club (preserving their wilderness retreat) as well.

3 Stakeholder Communities

From these three case studies, five categories of stakeholder communities can be identified. There are the mining companies and their local supporters who are interested in developing a particular ore body for the economic gains it would provide. There are the local and state (possibly federal) officials who must oversee the laws about mining and decide on the merits of approving a proposed mine project. There are three interrelated but different stakeholder groups that are opposed to mining in these cases. One group consists of local and regional individuals who are concerned about environmental protection and feel that mining is not sustainable in the area. National organizations with similar views provide additional resources and support to their efforts. Native Americans of the region make up another group. They are certainly concerned about environmental protection, but they also have concerns about tribal rights sovereignty [2]. These two groups often work together in the region. The third group consists of those that have special interest concerns about the local mine project but are not against mining in principle. If their special interest concerns are addressed, they would not oppose the mine. On the other hand, they are not willing to compromise on their issues of interest. Parties in this group may or may not join with the other two groups.

Today, most of these stakeholder groups put a great deal of effort and resources into communicating their views on the proposed mining project to the local and regional community. Earlier, companies had focused on making their case primarily to state and local officials who made the decisions about the needed permits and approvals. However, Native Americans and other local activists were increasingly able to put political pressure on these same elected officials and to stifle permitting efforts.

The mining companies have tried to counter with advertising campaigns, public meetings, and other communication efforts. Mining companies must answer questions about the sustainability of a proposed mine site to the community as a whole in order to obtain permits as the opposition has become more vocal and sophisticated in their counter campaigns. The technique of discourse communities and discourse analysis can make use of these communication efforts and their dialogue to gain insight about the different stakeholder groups. In particular, it is possible to use their communication efforts to explore the self-identity, the membership boundaries, key themes, and emotion con-



tent of these stakeholder groups. It is hoped that this better understanding will improve the dialogue between the mining company and the other stakeholders and lead to an improved chance for the sustainable mining of local ore bodies.

4 Discourse Communities

A detailed analysis of the different discourse communities for the Eagle Project was presented in Hutchins, Walck, Stern, and Campbell [3]. Four different stakeholder groups discussed in that paper are summarized here in Table 1 (The government community was not covered.). The results for these four examples are similar in nature to those for equivalent stakeholder groups involved with the Flambeau Mine and the Crandon proposal.

4.1 Kennecott Mineral Company

Kennecott Minerals Company identifies itself as a mining company that brings economic benefits to the community while protecting the environment. Kennecott's communication about the Eagle Project emphasizes two themes: mining is important to the economy, and mining can be sustainability achieved through the application of science and technology in adherence to regulations that require Kennecott to be accountable to the community. Stated values in the discourse by Kennecott are environmental safety/protection and community. Since the proposed mine has the potential to produce acid mine drainage, Kennecott repeatedly stressed its belief that science and technology along with proper engineering design can make mining safe for the environment. Kennecott also stressed its attention to standards and regulations. Kennecott argues that the local community should have confidence that it is accountable.

Kennecott's discourse thus attempts to create an identity for Kennecott as a member of the local community with the goal of bringing economic benefits to the community while protecting the environment. Kennecott used the term community much more often than other stakeholders in its communications, and it rarely used language that reflected emotion, preferring technical and scientific language. With its discourse of inclusiveness, Kennecott tried to convince the other stakeholders it should be considered as part of the local community. However, it did occasionally set a boundary around the community it belonged to, when it identified those who were emotionally against the mine as being outside the rational discourse it was having about the Eagle Project.



Table 1: Comparison of Discourse Communities

	Kennecott Minerals	Save the Wild UP	Trout Unlimited	Keweenaw Bay Indian Community
Themes	Community Safety Economy Technology Accountability	Risk Economy Environmental Protection Community	Fish Watershed Ecosystem Protection	Heritage Community Way of Life Spirituality Protection
Emotion	No	Yes	No	Yes
Identity	Mining Company that brings economic benefits to the local community while protecting the environment	Citizens against metallic sulfide mining in the UP	Group to manage & protect cold-water fisheries & their watersheds	Descendants of the regional Ojibwa
Boundaries	Includes the local community and most others. Excludes emotional anti-mining.	Includes local concerned citizens. Excludes MI government & Kennecott	Includes anyone who supports their goals.	Includes tribal & treaty lands. Excludes Kennecott & the MI government

4.2 Save the Wild UP

Save the Wild UP identifies itself as a local community of citizens who are against metallic sulfide mining in Michigan [4]. The group is very careful to specify metallic sulfide mining since the Marquette area has two large iron-ore mines and a long history of mining. Mining, in general, is looked upon with favor by much of the local community. The group's main themes in communication revolve around risk, environmental protection, and local community. These themes are central to the two general arguments the group raises to explain why approving the permits for the Eagle Project should not occur. One, available technology and its implementation is not adequate to prevent acid



mine drainage from the sulfide minerals exposed by mining. Any acid leakage would be devastating for the Salmon Trout River, the coaster brook trout, and nearby Lake Superior. Damage from the mine would negatively impact tourism and outdoor recreation that are now key to the long-term economic development in the UP. Two, Kennecott, as a subsidiary of Rio Tinto, represents outsiders who are not truly concerned with the long-term environmental and economy health of the local community. Kennecott will get most of the economic benefit, and the local community will face most of the risk. State officials are presented as representing downstate (distant) interests and are not adequately concerned with the local community. Save the Wild UP clearly tries to place Kennecott and state government officials outside the relevant community. The group's language often uses emotional appeal, and this has become more so as the permitting process has moved ahead. The group has stressed that as the permitting process has moved ahead that this is a referendum on metallic sulfide mining in the UP and approval for the Eagle Project will lead to multiple projects throughout the UP.

4.3 Trout Unlimited

Trout Unlimited is an ongoing organization that seeks to conserve, protect, and restore coldwater fisheries and their watersheds. Its discourse is at the local (Copper Country Chapter) and the state (Michigan Council of Trout Unlimited) level. Trout Unlimited seeks the maintaining of coldwater fisheries and believes in the use of science to achieve this. Its primary concern with the proposed Eagle Project are any potential impacts to the Salmon Trout River watershed and the population of coaster brook trout. The Michigan Council came out against the mine in April 2007 [5]. Its discourse language emphasizes quantification and causation with little emotional content. Trout Unlimited's community includes anyone that is interested or can help the organization carry out its goals. As long as its special interest concerns are adequately addressed, the group is not necessarily against the mining project. However, the organization believes any risk to its primary interest (coaster brook trout) outweighs any possible gain from the mine to its community.

4.4 Keweenaw Bay Indian Community (KBIC)

The Keweenaw Bay Indian Community identifies itself as the descendants of the regional Ojibwa Tribe. The main themes of their discourse about the mine are about their community, the importance of their heritage and way of life, their traditional views about the environment, and the importance of protecting the land as part of their heritage. KBIC sees the mine as a potential threat to these beliefs [6]. If the mine poses any amount of risk to their community and values, it should not get the required permits. There is also the issue of just how much input the KBIC (and other tribes) should have on the use of natural resources on ceded tribal lands. Native American sovereignty and rights are an ongoing issue in the region. Language in the discourse is emotional. KBIC was the only community stakeholder to formally decline to participate in Kennecott's Community Advisory



Group. The KBIC sets a boundary of its community of tribe members and treaty lands, but acknowledges common concerns with the people of Michigan. From their discourse, it is clear that Kennecott and state government officials are excluded from their view of community.

5 Engagement Efforts

Mining companies want to initiate a dialogue about a proposed mine site with community stakeholders to address and answer concerns about the sustainability of the mining project they might have. These communication efforts have been changing as the dynamics of getting the necessary permits have changed. In the 1970s and 1980s, mining companies emphasized communication with government decision-makers and less so with local community stakeholders. By the 1990s, this approach changes as resistant stakeholders were able to influence political decision-makers through the use of politics, media, and the courts, forcing mining companies to counter. The three case studies can be used to see how this has evolved.

5.1 Flambeau Mine

The initial attempt by Kennecott to permit the Flambeau Mine in 1976 did not go well. The effort was met with significant resistance. Resistant local stakeholders did not feel that their input was given adequate consideration in the permitting process of the Wisconsin Department of Natural Resources (DNR). The Rusk County Board went as far as to pass a zoning ban on mining to make this point. The zoning ban and declining copper prices ended this attempt by Kennecott to get the necessary permit for mining. When market conditions returned Kennecott to the project in 1986, the project was redesigned to better meet the concerns of the local government about the protection of local water sources. The Governor of Wisconsin created a task force of local stakeholders to review the project. It recommended that local government officials and Kennecott work out a mutually acceptable agreement about the proposed mine that was allowed under a new Wisconsin mining law. A Local Agreement and Land Use Permit was worked out. Some of the key points of the agreement included: local hiring goals, open observation of operations (over 125,000 visitors), limit on hours of operation, guarantee of off-site water wells, right of first refusal by the local government for any property sales by Kennecott, and a one time payment of \$100,000 to the local governments. The final agreement had to be approved by a public vote of the different local government boards. Public hearings were held by the three governing boards, and the agreement was passed by the city of Ladysmith, town of Grant, and the Rusk County Board in August of 1988. Reclamation of the mine site has also focused on the needs of the local community as recreational facilities and an industrial park have been incorporated into the plans.



5.2 Crandon Project

Like in the case for the Flambeau Mine, strong local opposition and low copper/zinc prices led Exxon to lose interest in the site during the 1980s. Exxon (and partner Rio Algom) restarted efforts to develop the site in 1994. By then, the Native American communities had opened casinos that could provide financing for their opposition efforts. The Wolf Watershed Educational Project (created by the Midwest Treaty Network) was launched in 1995. It sponsored a series of anti-mining speaking tours by Native Americans. At the same time, EarthWins was placed on the web with the same message. These efforts generated significant support for their views. Even sports-fishing groups that had been in opposition to Native American fishing rights joined in support against the mine as did many other diversified groups across the state. The state's Governor remained supportive of the mine for economic development purposes. Exxon responded with advertisements that stressed environmental protection and jobs. Exxon also negotiated a Land Agreement and Land Use Permit with the Town of Nashville Board. Public concern about the closed door nature of the negotiations and limited opportunity for public input led to the Board being replaced in the next election. The new Board rescinded the signed agreement. The courts later re-instated the agreement in 2001, but by then, it was a moot point. The opposition had clearly won the public discourse about the proposed mine.

5.3 Eagle Project

When Kennecott proposed the Eagle Project in 2004, it was clear that there would be a strong and well-organized opposition to the mine based on the experiences in Wisconsin. To counter this, Kennecott followed policies based on Corporate Social Responsibility (CSR) as established by its parent company Rio Tinto [7]. CSR as expressed by nonrenewable resources companies tries to establish several important themes [8, 9]: social legitimacy, responsibility to the local community, transparency of operations, sustainable development, care vs. accountability, and following expected standards and requirements. Kennecott has tried to communicate their commitment to these ideals to local and state stakeholders. The permitting process under the new Nonferrous Metallic Mining Regulations of Michigan requires a significant amount of public input into it. Kennecott has used two general approaches to make its case to local stakeholders. One is a traditional general information campaign based on a variety of media like TV ads, billboards, newsletters, and speaking engagements that stresses its CSR themes. The second has been the creation of a Community Advisory Group (CAG) consisting of a very large group of local stakeholders (Michigamme & Powell Townships, Marquette County, City of Marquette, the State Representative of the 109th district, Michigan United Conservation Clubs & National Wildlife Federation, UP Construction Council, Trout Unlimited, Superior Watershed Partnership, Lake Superior Community Partnership, Northern Michigan & Michigan Technological Universities, Michigan Departments of Environmental Quality & Natural Resources (fisheries), and Marquette County Soil Conservation District & Road Commission). Only the KBIC was not willing to participate in the CAG. Kennecott's stated goals for the CAG was



to relay information about the proposed mine to the community and to solicit meaningful input from the local stakeholders. While not a complete success, Kennecott's CSR approach has worked well enough to keep the permitting process online and moving forward.

6 Discussion

The evolving permitting laws in Wisconsin and Michigan have created more involvement of the public in the decision-making process. This change has led to opposing stakeholders becoming more sophisticated in their ability to communicate their message to other stakeholders and put political pressure on government decision-makers. Mining companies have responded by communicating their views to the other stakeholders as well. The result has been competing dialogues between the mining companies and those in opposition to the mine as they try to reach the other stakeholders (local residents and government officials). The competing dialogues center on three basic questions: What is the best economic direction for the local community? Can technology and its application adequately protect the environment? Do mining companies (and government) have the same values as the local community about the environment and sustainability?

With the Eagle Project, Kennecott adopted a CSR approach and formed a Community Advisory Group in order to be accepted by the stakeholders in the local community. Kennecott made CSR a distinctive theme, and it appears to have achieved mixed results. Kennecott's CAG is an effort to be inclusive and give local groups an opportunity to be directly informed about Kennecott's plans and to provide feedback. Kennecott believes it got the majority of the community behind the proposal for the mine through its CAG and the permitting process has been successful to date. However the main opponents of the mine were not persuaded to change their views and they continued their competing dialogues. Presently, they have gone to court to try overturn the permits. This same pattern was seen at the Wisconsin sites as well.

Why has Kennecott's effort not worked with some of the stakeholder groups [1]? If the role of CSR is to create solutions that meet the goals of both the mining company and the local community, then CSR requires addressing all the issues raised by stakeholders. In the Eagle Project, Kennecott's strong belief in its science and technology may have prevented it from understanding the level of concern about environmental risk in stakeholder discourses. Kennecott may have interpreted their concern as a failure to understand the science and technology that would mitigate risk instead of uncertainty about the ability of the science and technology to deliver as promised. These misunderstandings could make meaningful dialogue across stakeholder discourse communities leading to collaborative solutions more difficult. This can have the unintended consequence of raising the emotional level of the discourse against mining and escalating conflict.

Although CSR is by definition the strategy of a firm, stakeholders also have something to learn about engaging in discourse with a CSR firm. If stakeholders define community too narrowly by defending primarily the interests aligned with their social purposes at the exclusion of all others,



they may also hinder or preclude the possibility of interacting with a firm and its other stakeholders to craft a solution. If stakeholders fail to listen effectively to the beliefs and values of the mining companies and their supporters and use emotional, divisive language, they risk being judged prematurely and closing communication channels.

It is of course quite possible that the conflicting social purposes of multiple discourse communities cannot be resolved through a strategy of CSR which seeks to meet both the goals of the mining company and the goals of society, by voluntarily finding mutually-acceptable solutions that allow mining while reducing risk through responsible practices. If the risks of a proposed mine are deemed too high, and trust in the mining company is low, opposing stakeholder groups may simply adopt a conflict-generating and legal strategy to stop a mine or to win significant concessions in the way a mine is implemented. This has clearly happened in the cause of the Eagle Project. In that case, a CSR strategy will have little effect on those stakeholders, and the mining company needs to implement a strategy of mediation and conflict resolution. The success of the permitting process is determined by how many of the stakeholders are open to the CSR strategy of the mining company and how many are not. For the Crandon Project there were too many in the former group and for the Eagle Project less.

7 Conclusion

As learned from the case studies, a mining company wishing to get a new mine permitted must not only meet the legal and technical requirements established by the state but must also hold its own in the communication of views to the public. Mining companies like Kennecott have moved toward CSR and its themes as a way to gain public support for their proposals and to counter the barrage of public criticisms from opposed stakeholders. The use of CSR apparently has little effect with stakeholders whose views and philosophies are so divergent from those of the mining company that there is no common ground for discussion and compromise. Accordingly, the success or failure of a permitting effort depends to some extent to the size and influence of such stakeholder groups. This difference is seen with the Crandon case with the large and significant involvement of Native American communities as compared to the Flambeau Mine and Eagle project where more of the stakeholders were open to discussion and compromise. The mining company's success depends on its ability to persuade enough stakeholders to accept its message of CSR instead of the anti-mining message of the opposing stakeholders. The use of CSR and stakeholder engagement can help do this if stakeholders are willing to listen and accept what is said. If the company can't do this, they could well face the situation like Crandon where many stakeholder groups were persuaded to accept the anti-mining message of the opposing groups.



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References

- [1] CAMPBELL G., and WALCK C.: The Debate over the Impact of Mining on the Environment and Sustainability in the Local Community, Preprint 08-024, Society for Mining, Metallurgy and Exploration, 2008.
- [2] ALI S.: Mining, the Environment, and Indigenous Development Conflicts, The University of Arizona Press, Tucson, Arizona, USA, 2003.
- [3] HUTCHINS M., WALCK C., STERK D., and CAMPBELL G.: Corporate Social Responsibility-A Unifying Discourse for the Mining Industry, Greener Management International: The Journal of Corporate Environmental Management and Strategy, 2007, **52**, pp. 17-30
- [4] SAVE THE WILD UP: Fliers: Not Just an Environmental Issue: Water is the currency in the economy of the 21st century; Top 12 Reasons to Say “NO” to a Metallic Sulfide Mine on the Yellow Dog Plains, 2007.
- [5] MICHIGAN COUNCIL OF TROUT UNLIMITED: MCTU stands Firm against Kennecott Mine Project, Press Release, April 10, 2007.
- [6] NORTHWOOD WILDERNESS RECOVERY: Special Issue: Metallic Sulfide Mining, Wildlands Update, May 2005.
- [7] KENNECOTT EAGLE MINERALS COMPANY: Kennecott Eagle Minerals Communities Relations Plan 2007-2011, Marquette, Michigan, USA, 2005.
- [8] JENKINS H.: Corporate social responsibility in the mining industry: Conflicts and constructs, Corporate Social Responsibility and Environmental Management, 2004, **11.1**, pp. 23-34.
- [9] JENKINS H. and YAKOVLEVA N.: Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure, Journal of Cleaner Production, 2006, **14**, pp. 271-284.

