

New Mining in This Community: Select Areas of Marquette and Baraga Counties

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April 22-June 29, 2010



This report attempts to objectively identify the issues of importance to the people who fall in the middle of the two extreme views on mining and the community. Their views will be used to establish a social baseline of where this group positions itself as new mining moves forward in the Upper Peninsula of Michigan (U.P.) with special attention drawn to the U.P. counties of Baraga and Marquette. The project idea was launched by Kennecott Eagle Minerals Company (KEMC) and then constructed, conducted, and analyzed by two independent community consultants. Over the span of eight weeks, eleven sessions gave people with different economic, political, social, and cultural backgrounds who were not strongly for or against new mining development a place to share their views and opinions on the strengths, weaknesses, opportunities, and threats (SWOT). Session results are summarized here. This summary and more in-depth correlation and factor analysis will be combined and made part of a more comprehensive report written by another researcher.

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Mining and the Community: A “Conversation”

September 29, 2010

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Objective

The purpose of this summary report is to objectively identify key social issues and benefits related to the KEMC project using a neutral research body and input received systematically from the general public community.

Future Use of the Study's Findings

The significant issues identified in this study will help in the preparation of a community for the advancement of new mining in the area. It will also help establish a social baseline and provide valuable information in the assessment of the KEMC project's effects. Key social and economic issues (e.g. employment, environment, infrastructure, tax revenues, education, health and safety, etc) will be examined now and then studied over time. Comparisons will be made to measure the KEMC effects at the micro and macro levels. Recommendations may come forward on which management strategies and actions may promise to help KEMC to mitigate the negative issues and enhance the positive mining effects as this mining company moves forward and become a part of the community's fabric.

Methodology

The focus group methodology is one among many methodologies used to summarize systematically perspectives, opinions, and relative as well as absolute values on an issue held by targeted groups of people. Its selection was based on the ability to combine qualitative comments of focus group members with quantitative study of relationships across variables. It permits researchers to paint a picture of combined local perspectives and encourages individuals to think freely, consider others' ideas, respond to others' ideas, and refine their own.

To elicit as many views as possible while inviting people with similar characteristics from the community to the same sessions, two types of sessions were offered to the people in the middle of the viewpoint spectrum. The first type was **thematic**. Groups of people were brought together if they shared business backgrounds, professional interests, or social concerns in one of the following areas: (i) Young Adults and Academicians; (ii) Business and the Economy; (iii) Community Health; (iv) Infrastructure; and (v) Government, Municipalities, and Public Finance. The second type of session was **general**. People living in targeted areas were invited if they lived, operated a business, or were involved in an organization linked to one of the above themes. It was recognized that having focus groups based on themes would be difficult in remote areas given the sparse populations living in the areas within close proximity to the Eagle and Humboldt Mill Projects. Invitees to the general sessions shared geography but they differed in terms of status, job, income, environmental concerns, occupation, and education. See Appendix A.

Two to three times as many people were invited to participate using the largest business directory in Marquette County provided by the Lake Superior Community Partnership (LSCP), the online directory provided by the Baraga Chamber of Commerce, the area's printed telephone book and the internet. The hope was to attract five to ten people to each session.

To make the role of KEMC in this project clearly transparent, the following protocol was followed in each session. At the start, a KEMC employee welcomed everyone, asked everyone to read a short profile of the KEMC project, and stated that KEMC was the sole funder of this project. That KEMC employee then left the premises and never returned. The session facilitators then introduced themselves, read to the group a disclaimer that identified Drs. Ferrarini and Siles as independent consultants, not employees of a regional university, and provided a brief overview of what to expect next. See Appendix B.

It is important to note that the participants were reminded that they were invited to participate in one of these sessions because they had not been identified as individuals with extreme views as evidenced in the media, on the internet, or via another venue. Participants were encouraged to continue to be involved only if they felt that they could look comprehensively and objectively at the strengths, weaknesses, opportunities, and threats without advancing special-interest agendas. See Appendix B. After anyone who felt compromised left, remaining session participants then broke up into small discussion groups comprised of two or more individuals. Individuals were asked to group with people that they did not know if at all possible and asked to avoid sitting with others that they knew very well. The hope was to get people with diverse backgrounds looking at the SWOT issues from various perspectives. During these breakout sessions, individuals privately discussed each SWOT category for 6-10 minutes. (This time range was provided to allow for the variances in the average size of the small groups and the flow of conversation.) Some SWOT guidelines were provided and were intended to serve as things to think about if there was a lull in the dialogue. Participants were not required to use the guidelines. See Appendix C. One person in each group listed the most compelling factors for the group on a sheet of paper. Later, all groups merged into one and one person from each small group shared its list with the comprehensive group. A general conversation in the larger group setting proceeded. Consensus determined the five top factors in each of the four SWOT categories during the last 40- to 60-minute period of each session. These top items were placed onto large post-its. They were recorded for analytical study.

Session Overview

In total, ninety-five people participated in the formal sessions between April 22 and June 29, 2010. Dr. Ferrarini or Dr. Marcelo or both usually served as a discussion facilitator. On one occasion an outside facilitator, Dr. Steven Nelson, a political scientist with Native American research interests, assisted in facilitating the L'Anse session. The NMU Economic Student Association was selected as the student organization to help recruit young adults and academicians; it sponsored a two-part series on mining and the community, highlighting the pros and cons from the two extreme perspectives on the 6th and 8th of April of 2010, respectively.

Summarized Backgrounds in the Ten Formal Sessions

Sixty-six percent of the 95 participants were male and the remaining thirty-four percent were female. The average age was 48 years with the oldest participant being 80 and the youngest, 21. Exhibit 1 shows the breakdown of their educational attainment, and Exhibit 2 provides a background on the participants' jobs and the links between the jobs and mining.

DESCRIPTION	PERCENTAGE
High School Graduates or GED	15.05%
Some College Courses	24.73%
Undergraduate Degree	30.11%
Some Graduate Courses	8.60%
Masters Degree	13.98%
Ph.D. Degree	7.53%
TOTAL	100.00%

DESCRIPTION	CONNECTION	PERCENTAGE
Government	Direct	5.38%
Mining	Direct	2.15%
Businesses	Indirect*	46.24%
Youth	Indirect*	12.90%
Retired	Indirect*	7.53%
University	Indirect*	5.38%
Non-Profit	Indirect*	5.38%
K-12 Education	Indirect*	3.23%
Health	Indirect*	3.23%
Not in Labor Force	Indirect*	3.23%
None Specified	Indirect*	3.23%
Infrastructure	Indirect*	1.08%
Legal	Indirect*	1.08%
TOTAL		100.00%

The direct economic impact of new mining jobs will spill over into other sectors of the economy, which would create many new (indirect) jobs. This phenomenon is referred to as an employment multiplier effect.

Findings

In each session members of the focus groups ranked the top five factors related to the (i) strengths (S), (ii) weaknesses (W), (iii) opportunities (O), and (iv) threats (T) of mining in their community. This group ranking was based on comprehensive group consensus. The top rankings were decided on by the larger group only after each sub-group announced and briefly explained its own key factors for each of the SWOT categories.

Correlation and factor analysis indicated similarities between the rankings of the views presented in the comprehensive session and sub-group breakout sessions. Hence, attention is specifically drawn to and details are explicitly provided for the top five factors for the purpose of the report. Factors not making the top-five rankings are mentioned periodically if a clear and statistically significant connection was made between a factor that did not make the top five list and one or more of the top five factors.

A matrix was used to assign a point value to the ranking in each item: 10 was assigned to the top item, 8 was assigned to the second to the top value, 6 was assigned to the third item, 4 was assigned to the fourth, 2 was assigned to the last or final item on the top list, and 1 was assigned to all items not appearing on the top-five list. This point system was used to rank the top five and used in the correlation analysis and factor analysis. The results are presented in Exhibit 3 below. Commentary on the exhibit follows.

Exhibit 3: Top SWOT Variables

	STRENGTHS ("MEANS")	WEAKNESSES ("MEANS")	OPPORTUNITIES ("MEANS")	THREATS ("MEANS")
1.	Jobs and Employment (8.60)	Project's Short Time Frame (6.40)	Multiplier Effect (5.40)	Environmental Threats (8.00)
2.	Multiplier Effect (5.40)	Environmental Risks (4.80)	Increased Mining (5.20)	Policy and Legislation (4.00)
3.	Mining Culture (4.89)	Infrastructure (3.80)	Infrastructure (3.00)	Market Volatility (2.80)
4.	Infrastructure (2.80)	Lack of Information and Communication (2.80)	Positive Community Impact (3.00)	Lack of Short and Long Term Plans (2.60)
5.	Increased Tax Base (2.00) and Accountability/Social Responsibility (2.00)	Company Reputation (2.60)	Increased Tax Base (2.80) and Jobs and Employment (2.60)	Catastrophe/Safety (2.00)

Exhibit 3, Column "**Strengths**" above indicates that jobs and employment were consistently ranked highest among all strength related variables across the groups. People discussed the importance of mining in this economy and they expressed that they understood why new jobs with family-sustaining incomes were important to this area given its current struggles in the context of the Great Recession. The multiplier effect was recorded as the second most important strength variable. Session participants discussed the many vertical and horizontal links between KEMC and other businesses. A new mining job could lead to more income for spending, investing, saving, and charitable-giving in other parts of the economy, according to study participants.

Mining culture/heritage was recognized as the third most important aspect to new mining because this region possesses deep, long, and rich connections to past mining. Thus, session participants talked about how this solid foundation was something new mining companies could build on. They felt that local residents possessed an inherit understanding of the positive and negative aspects of mining. This understanding could make mining more socially profitable in this area compared to elsewhere.

Infrastructure expansion linked to new mining was expected to contribute to the development of new roads, electrical lines, utilities, and the like elsewhere. Private corporate funding for the initial expansion was viewed as beneficial and partially credited for helping to

increase the area's tax base. Session participants discussed the possible new infrastructure that would be built in otherwise remote areas. They thought it could help attract new business and housing development in areas not far from the mine. They reminisced about the bustling mining communities of the distant past.

Finally, session participants discussed how KEMC could follow in the footsteps of other local mines important to the economy. If KEMC took the lead of the other major mining company in the area, its company accountability and social responsibility would lead to new investments in local schools, recreational trails, museums, and community organizations.

The top five weaknesses in order of perceived importance are illustrated in Exhibit 3, Column "**Weaknesses.**" First, study group participants viewed the relatively short life span of the KEMC project as the number one weakness. This issue had two layers. One, the uncertainty created by a short-term project was of concern to many. Individuals held beliefs that mining should support lifetime careers. At the same time, they discussed that technological advancements have made mining today more productive and environmentally sensitive than in the distant past. Two, communities, as represented by the focus groups, were concerned about the short-run surge in taxes followed by a possible drought. If proper planning did not take place, participants viewed the short-run increases in tax revenues as possibly harming the community, especially if government officials and others spent unwisely and left them cash-strapped and with maintenance problems in the future.

Environmental risk was ranked second. The BP oil spill and the media frenzy that followed heightened environmental awareness, according to participants. They commented on how constant discussion about the spill made them realize the importance of keeping abreast of known and unknown environmental risks associated with all types of natural resource extraction. Session participants stressed having locals and KEMC recognize, address and respect the environmental risks. Some people mentioned that some of the "windfall taxes and profits" should be dedicated to this cause. It was important to many that new profits, tax sources and income be spent and invested strategically rather than consumed unwisely. Participants returned to their discussion to the importance of planning for the future.

Third, community members commented on the stresses that new mining could place on the existing infrastructure. Local infrastructure is aging or does not exist in the production sites. KEMC could have to fund most of what they need. The tax coffers in the local area and state are simply not able to finance it. Session participants mentioned that even if KEMC expands its infrastructure they recognized some of the hidden costs associated with it and that was a concern to some. New or expanded infrastructure (and the KEMC production site) would prevent some individuals from using current trail systems, roads, recreational areas and the like. Additionally, participants expressed concern over the new noise being introduced into areas in which the KEMC infrastructure is expanding and production is advancing. However,

session participants recognized that these negative externalities affected a relatively small population of households, businesses and recreationalists.

Finally, the lack of information and communication between KEMC and the “bad” public perception of Rio Tinto were viewed as important. People voiced need for more information about the KEMC project, its current plans, and exit strategy. They also requested accurate information on past issues linked to health and safety concerns of other subsidiaries of Rio Tinto, a London-based company. The void in reliable and easily assessable information is perceived to be a weakness of mining in this community.

Exhibit 3, Column “**Opportunities**” identifies the top opportunities associated with mining in this community as perceived by the groups. The multiplier effect ranks number one among participants. According to them, new mining company promises to attract new high skill, high wage jobs and people into the area. Average income would rise and local spending, saving, investing, and charitable-giving would increase throughout the economy. With the multiplier effect, participants hoped that KEMC could help generate a permanent increase in the tax base if the new mine provides current residents with additional income, benefits, and business opportunities and it successfully attracts and retains new talent into the area. The strategic investment, consumption, saving, and charitable-giving of today were viewed as important in creating, attracting, and retaining jobs in the future even on completion of the KEMC project. Session participants hoped that long-run planning would help.

Session participants connected the increase in income and spending to additional community benefits. Due to the expanded tax base, higher incomes, the improved public infrastructure and an overall KEMC investment in social capital across the region, new and existing community projects in health, education, transportation, broadband, etc. could grow and develop.

Session participants also linked the KEMC mining of today to more mining in the future. They discussed current exploration efforts underway and mentioned plans for the opening of other mines across the Upper Peninsula.

As expected, environmental threats are the number one potential threat as presented in Exhibit 3, Column “**Threats.**” Again, session participants discussed how the devastation caused by the BP oil spill influenced their thinking on this topic. Some individuals shared the same opinions that they presented in the discussions of weakness; and others moved on to discuss how the unclear national and state policies and legislative rules and regulations regarding mining and waste disposal generated uncertainty. In addition, these participants discussed how they were disturbed by a general lack of solid understanding of which regulatory bodies (national, state, or local) are responsible and held accountable for monitoring KEMC’s progress in managing environmental risks. Simply put, people felt that current laws and their ambiguous nature made it possible for mining companies to pursue profits without balanced concern for the environment. Participants repeatedly connected a possible Kennecott disaster

to placing the fresh waters of Salmon Trout River, Yellow Dog River, and Lake Superior at risk. If a disaster did occur at KEMC, participants viewed the BP oil spill as providing evidence that many locals' livelihoods, their styles of living, and the U.P. culture would be negatively impacted. During this discussion, session participants again stressed the importance of strategically planning and managing the environmental risks against the pursuit of profits and high incomes in the area.

Due to vast experience of local residents with the mining industry, participants recognized the cyclical nature of the mining industry as the third ranked threat and discussed the problems associated with it. The boom-and-bust cycle of mining caused by wild swings in mineral prices in world markets can be hard on communities. In summary, the session participants provided an argument like this. They cited unemployment as the main problem associated with a recessed mining economy. When mineral prices persistently fall in world markets, local people are negatively impacted. Unemployed miners and managers consume and save less, negatively impacting the people with whom they conduct business. Tax revenues for local and state governments shrink as more people join the unemployment ranks. If all of this continues, thriving communities become abandoned mining areas. The Upper Peninsula of Michigan is filled with them but the area also has stories of success, according to focus groups. Session participants discussed how some communities continued to prosper as some mines closed.

Focus group members felt that the lack of publically available KEMC short- and long-term plans was a threat to the area. According to participants, by limiting the community's access to KEMC plans people felt that KEMC was signaling to the community that it is not fully committed to the community and that it is hiding something. Participants wanted to know more about what to expect from KEMC on the economic front, its commitment to helping with sustainable growth in the area, its plans for social investments, and its efforts to stay on top of environmental issues. Compared to other discussions, this one was short, sweet, and to the point.

Finally, health and safety concerns in mining, especially in Rio Tinto, were identified as a major hazard. Again, recent mining catastrophes and alleged violations against labor rights in the Rio Tinto family were pinpointed by participants. Participants often commented that researching the alleged violations was a relatively easy task. However, researching the validity the claims against Rio Tinto or find information on the outcome of legal battles involving Rio Tinto was not so easy. Focus group participants were interested in gaining access to well-documented and legally supported information that could help them self-evaluate Rio Tinto's overall record on health, safety, and labor issues.

Conclusion

The work presented here provides some quantifiable evidence to support the claims made by various members of the community on the issue of mining. The economy/jobs and the environment do matter according to the views of focus group participants. Other factors are important, too. Additional research on this topic is needed and the hope is that this report leads to it. Special thanks go out to all individuals and organizations who participated in the sessions as well as those individuals who respected the general layout of the procedure used to gather information.

Research Team

The core research team is comprised of Tawni Hunt Ferrarini, Ph.D. in Economics, and Marcelo Siles, Ph.D. in Agricultural Economics. They were assisted by Derek Bush, Nicoletta Fraire and Kate Mueller.

Tawni H. Ferrarini is the Sam M. Cohodas Professor and the Co-director of the Center for Economic Education and Entrepreneurship at Northern Michigan University. She is the inaugural recipient of the National Association of Economic Educators' Abbejean Kehler Award and received the 2009 Michigan Economic Educator of the Year Award and an NMU Distinguished Faculty Award. Her work for the Council on Economic Education and reputation as a workshop leader on both the use of technology in the classroom and the integration of economics and American history helped her earn these awards. She teaches a variety of online courses regularly and employs technology tools to structure successful online courses and workshops in economic education. Dr. Ferrarini publishes in economic education, technology and education journals on how to effectively employ technology and to successfully motivate the current generation of students. She regularly contributes to Econ4u.org and writes for newspapers on economic education, entrepreneurship and personal finance. She earned her doctorate in economics from Washington University, where she studied under the 1993 Nobel laureate Douglass C. North.

Marcelo E. Siles is the Executive Director of International Programs at Northern Michigan University. He worked as Co-Director of the Social Capital Initiative and as a Senior Research Associate in the Julian Samora Research Institute at Michigan State University. His research focuses on the role of social capital in economic development and poverty alleviation. He has published about social capital and Latino issues in books, book chapters, journal papers, research reports, and working papers. He also made several domestic and international presentations. Dr. Siles also worked as a consultant for the World Bank, Andean Development Corporation, and the United Nations Economic Commission for Latin America and the Caribbean. Before coming to the United States, he worked as a Development Loan Advisor for the United States Agency for International Development, USAID/Bolivia. He also held two positions in the public sector: Deputy Secretary of the Bolivian Treasury and Advisor to the Economic and Financial Commission of the Bolivian Senate. He received his Ph.D. and M.S. in Applied Economics from Michigan State University.

Derek Bush assisted Drs. Ferrarini and Siles. He is an undergraduate student at Northern Michigan University (NMU) majoring in Economics and minoring in Spanish. Bush's commitment to scholarship, leadership, and service is evidenced by his current roles as Co-President of the NMU Economic Student Association and as Vice-President of NMU's Mortar Board National College Senior Honor Society Telion Chapter. He is also involved in other research projects at NMU and is interested in varying fields of economic study including resource economics, economic history, and social capital. Bush will graduate from NMU in May 2011.

Nicoletta Fraire contributed to the project through her research on the media coverage of the KEMC project and the BP Oil Spill. She has a university degree in Chinese Studies from the University of Venice, Italy. She is an active independent contractor and serves as a free lance writer.

Kathryn Mueller edited and proofread this report. She is a freelance writer/editor living in Syracuse, New York. Mueller has published short creative and critical literary works in *Dotlit*, *Future Earth*, *Tenemos*, and *Rain Taxi*. She received her M.A. and B.A. in Writing from Northern Michigan University, where she earned her Labor Leadership Certification and received the English Department's Outstanding Graduating M.A. Student Award. She has freelanced for the last six years; concurrently, she's been a technical writer, writing tutor, data analyst, and adjunct instructor. Mueller currently works as Audio Delivery Systems Administrator for a national radio syndicator.

Special thanks are extended to **Lake Superior Community Partnership** for the excellence in service and their solid administrative contributions to this project. Their connections in the private and public sector were highly valued. In particular, these connections helped reduce the costs of organizing sessions and recruiting participants meeting a certain criteria independently set by the consultants. Participants were recruited in and outside of the LSCP membership base.

Appendices

Appendix A

In the Middle: Mining and the Community Strengths, Weaknesses, Opportunities, and Threats

<http://miningandcommunities.blogspot.com/>

Purpose: The community sessions are intended to objectively identify the issues of importance to the people who fall in the middle of the two extremes on mining and the community. The sessions are launched by Kennecott and conducted by two independent community consultants, numerous researchers, and discussion facilitators. They are intended to give people in the middle a place to share their opinions on the strengths, weaknesses, opportunities, and threats (SWOT) facing mining and the community. Comments will be combined, analyzed, and made part of a comprehensive report. It will be shared with the public and used by Kennecott Eagle Minerals to help establish a social baseline.

SESSION FORMAT

SWOT analysis with leaders asking sample questions over a 40-60 minute period. Ideas are included here. Ranking by the group follows for an additional 40-60 minutes with wrap-up included.

- Topics to be discussed would include:
- What are the main issues of the project related to their particular interests?
 - Why mining in the area? Why not?
 - What aspect of the project would be considered a serious issue (e.g. construction, operation)? Why?
 - How would they rank the issues in terms of seriousness to the community?
 - How can these issues be addressed?
- What are the benefits of the project? Costs?
 - Provide details.
 - What aspect of the project would create the biggest benefit/cost (e.g. construction, operation)? Why?
 - How would they rank the benefits/costs in terms of importance to the community? Why?
 - How can these benefits be enhanced and costs minimized or avoided?
 - What is considered a local job? Local supplier? Definition and scope.

Sessions:

1. **Young Adults and Academicians**, Northern Michigan University, Thursday, April 22, 2010, NMU-LRC Room, 1-3 pm (Sponsored by the Economic Student Association which followed a two part series on mining in the UP. Participants included Kennecott and Save the Wild UP.)
2. **Business and the Economy**, Tuesday, June 1 – NMU Charcoal Room - 4pm
3. **Community Health**, Thursday, June 3 – Marquette City Hall - 6pm
4. **General Session**, Wednesday, June 9 – Michigamme Twp – 10am, 202 W. Main St., Michigamme Township
5. **General Session**, Thursday, June 10 – Powell Twp - 6pm, 101 Bensinger, Big Bay
6. **General Session**, Monday, June 14 – Republic Twp - 3pm, 110 Kloman Avenue, Republic
7. **Infrastructure**, Wednesday, June 16 – NMU Charcoal Room - 8am
8. **General Session**, Tuesday, June 22 – L'Anse Twp - 6pm, 126 Main St. L'Anse
9. **General Session**, Thursday, June 24 – Ishpeming City Hall - 10am, 100 E. Division St.
10. **Government, Municipalities, and Public Finance**, Tuesday, June 29 – Peter White Library - 1pm
11. **Cultural Significance**, Thursday, July 1, Ramada Inn, 6-7 pm

Appendix B

Session Leaders' Guide

1. Please invite people to read their sheets and complete the background surveys

2. Welcome

3. Mining and the Community Discussion: The Purpose

These community sessions are intended to objectively identify the issues of importance to the people who fall in the middle of the two extremes on mining and the community. These sessions are funded by Kennecott. However, they are conducted by two independent community consultants, numerous researchers, and discussion facilitators. These meetings are intended to give the people in the middle a place to share freely their opinions on the strengths, weaknesses, opportunities, and threats (SWOT) facing mining and the community. Comments will be combined, analyzed, and made a part of a comprehensive report. It will be shared with the public at the <http://miningandcommunities.blogspot.com/>. It will be used by Kennecott Eagle Minerals to help establish a social baseline.

4. Before we get started, we want to make sure that everyone attending tonight is a person who has not identified him or herself formally with strong opinions on one side or the other. If you have, we thank you for your time but, unfortunately, must encourage you to not to participate. The sessions are for the people who fall in the middle of the two extremes.

5. Introductions (no recording)

6. Disclaimer: Thank you for participating in this study. Some of you know either Marcelo or me, or both of us, through our work as members of the Northern Michigan University faculty and staff. However, it is important that I point out that today Marcelo and I are not representing NMU, but rather we are working as private consultants on this study. The university is not involved in this project and we want to make sure that people understand that. This is a Kennecott-funded and -supported project, but one we hope will give the entire community valuable information.

7. Recording: For note taking purposes, this session will be recorded and used to make sure that the research accurately reflects final group discussions.

8. Overview of the session

- a. In front of you, you have a handout from Kennecott. Please take a few minutes to review it.
- b. Please complete the background information sheet.
- c. Please find someone or a small group of people that you do not know. Within this group, you will have four rounds to generate a list of (i) internal strengths of mining in this community; (ii) internal weaknesses of mining in this community; (iii) comprehensive opportunities taking into account internal and external considerations; and (iv) comprehensive threats taking into account internal and external considerations. In front of you is a set of SWOT suggestions. At the end of the four 6-10 minute rounds, all groups will merge. We will then rank the most important item in each SWOT area using consensus.

9. Conclusion

Thank you for your time. The results will be posted in early fall at

<http://miningandcommunities.blogspot.com/>

Appendix C

Strengths Weaknesses Opportunities and Threats (SWOT) Analysis Mining and the Community

This SWOT example is for a new business opportunity. Many criteria can apply to more than one quadrant. Identify criteria appropriate to your own SWOT situation.

<p>STRENGTHS: Criteria Examples Consider this from an internal perspective, and from the point of view of the U.P. community. Also consider the strengths in the world wide mineral and metal market if this type of production were to take place in this community.</p> <p>Advantages of nickel mining in this community? Capabilities? Labor resources? Other resources? Competitive advantages? Unique selling points? Experience, knowledge, data? Financial reserves, likely returns? Marketing - reach, distribution, awareness? Innovative aspects? Location and geographical? Price, value, quality? Accreditations, qualifications, certifications? Processes, systems, IT, communications? Cultural, attitudinal, behavioural? Management cover, succession? Philosophy and values?</p>	<p>WEAKNESSES: Criteria Examples Consider this from an internal perspective and from the mineral and metal market perspective in a global economy. Think about the weaknesses of this type of production in this community.</p> <p>Disadvantages of this production in this community? Gaps in capabilities? Lack of competitive strengths? Reputation, presence and reach? Financials? Known vulnerabilities? Timescales, deadlines and pressures? Cashflow, start-up reserves, cash-drain? Continuity, supply chain robustness? Effects on core activities, distraction? Reliability of data, plan predictability? Morale, commitment, leadership? Accreditations, etc? Processes and systems, etc? Management cover, succession?</p>
<p>OPPORTUNITIES: Criteria Examples Bring in external considerations and factors.</p> <p>Market developments? Competitors' vulnerabilities? Industry or lifestyle trends? Technology development and innovation? Global influences? New markets, vertical, horizontal? Niche target markets? Geographical, export, import? New USP's (Unique Selling Propositions/Points)? Tactics: eg, surprise, major contracts? Business and product development? Information and research? Partnerships, agencies, distribution? Volumes, production, economies? Seasonal, weather, fashion influences?</p>	<p>THREATS: Criteria Examples Bring in external considerations and factors.</p> <p>Political effects? Legislative effects? Environmental effects? IT developments? Competitor intentions - various? Market demand? New technologies, services, ideas? Vital contracts and partners? Sustaining internal capabilities? Obstacles faced? Insurmountable weaknesses? Loss of key staff? Sustainable financial backing? Economy - home, abroad? Seasonality, weather effects?</p>