

Individual and Social Effects of Changes Related to the Resumption of Mining Activity in Malartic: 2006–2013

KEY MESSAGES AND SUMMARY

March 2015

Geneviève Brisson, Catherine Morin-Boulais, Emmanuelle Bouchard-Bastien

This study is further to the mandate awarded to Institut national de santé publique du Québec (INSPQ) by Direction de la santé publique de l'Abitibi-Témiscamingue [the Abitibi-Témiscamingue department of public health]. The research is funded by Ministère de la Santé et des Services sociaux du Québec [MSSS – Québec's ministry of health and social services].

Key messages

Using a qualitative approach, researchers consider how Malartic residents have experienced changes in their community resulting from the development of an open pit mine and the effects of these changes on quality of life and social dynamics. They also collected residents' opinions about risk management, their perceptions about health risks and their hopes and outlook for the future.

The main findings of the study are as follows:

- The arrival of the Canadian Malartic mine improved the quality of life for certain residents and revitalized the economy.
- The announcement and subsequent development of the mine had psychological impacts leading to feelings of distress, anger, demotivation, resignation and loss of trust in authority.
- The mine also had social impacts, including increased inequality between residents, conflict and community polarization.

- Among the social impacts, the two most often mentioned by respondents were the relocation of over 200 buildings to make way for the mine and the reconfiguration of local powers.
- For many, the blasting, the increase in dust, traffic and noise and the spatial reconfiguration of the municipality were major disturbances and a source of health worries.
- According to the Malartic residents interviewed, risks were not managed in keeping with the public health guidelines, especially with respect to openness, transparency, equity and caution.
- The majority of people interviewed for the study have little confidence in Malartic's future after the mine closes, and note that little has been done in preparation.

These findings can be used to improve individual and community health as mining operations continue in Malartic, and can also serve for other mining projects in Québec.

Summary

Project background and history

This report summarizes the first phase of ethnographic research undertaken as part of a longitudinal study of the population of Malartic, a municipality in the Abitibi region that has undergone major changes as a result of the Canadian Malartic open pit gold mine.

The municipality of Malartic (population 3,449 in 2011) stands on top of a gold deposit that was worked by several underground mines between 1935 and 1965. When gold prices declined in the 1980s, mining operations in Malartic ceased, striking a major blow that affected the town's population, economy and social vitality. It was in this context that Osisko Mining Corporation, hereinafter "Osisko" or "the mining company," presented plans for an open pit mine on the Canadian Malartic deposit in the mid-2000s. To develop the mine, most of the southern part of the town had to be relocated, an operation carried out in 2008 and 2009. After public hearings were held by the Bureau d'audiences publiques sur l'environnement [BAPE – office of public hearings on the environment] (BAPE, 2009), an order in council authorizing Osisko to proceed with mining was issued in August 2009. The mine went into production in 2011.

In May 2012, Direction de santé publique (DSP) de l'Abitibi-Témiscamingue, acting in response to residents' concerns and complaints, asked the Institut national de santé publique du Québec [INSPQ – Québec's public health institute] to conduct research on the health impacts of renewed mining operations in Malartic as part of an epidemiological survey by the regional director of public health. A study on social changes and their impacts was one of the projects that the DSP commissioned the INSPQ to do. The study was conducted from August 2012 to August 2013.

Study objectives

To improve our understanding of the social changes affecting the community of Malartic since the Canadian Malartic project was announced in 2006, the research sought to:

- Establish an initial portrait of the actual and anticipated social effects (positive and negative) of the mine
- Establish an initial portrait of the social perceptions of health risks
- Document the opinions and effects specifically associated with managing the risks of the mining process.

Methodology

The study, which used a qualitative ethnographic approach, is based on 93 semi-directed interviews conducted with a representative sample of Malartic residents and socioeconomic stakeholders during the summers of 2012 and 2013. The analysis takes into account the concepts of psychological and social impact (Franks, 2012) and social perceptions and representations (Moliner et al., 2002), as well as the primary risk management guidelines recommended by Québec public health authorities (Ricard, 2003).

Main research findings

Changes experienced between 2006 and 2009

The announcement of the mine project, exploratory drilling and the relocation or destruction of more than 200 buildings in the town's southern district caused the following psychological and social effects for most Malartic residents:

- Insecurity due to lack of information
- Feelings of powerlessness
- Distress, sadness, frustration, anger and stress related to the relocation of the southern part of the town.

However, a small number of people felt joy and hope for the municipality's economic future.

Changes experienced between 2009 and August 2013

The issuing of the order in council authorizing the mine (2009) and the start of operations in (2011) led to numerous economic, cultural, social, individual and quality of life changes.

- Overall, study participants agreed that the economy had recovered, but many felt the recovery was not as significant as promised or anticipated. A number of people were disappointed.
- Quality of life improved for people employed by the mine: no “fly-in fly-out,” more services, a more attractive and dynamic municipality. Many residents also expressed pride in their community. However, many also felt that life was no longer as quiet, and also noted that certain services remained unavailable, or were no longer available locally.
- Socioeconomic inequality increased, especially in terms of the gap between rich and poor, and certain groups became more vulnerable (e.g., residents of the southern district, the economically disadvantaged, seniors, children).
- For a number of people, the departure of residents and founding families, the demolition of important buildings (schools, community centres, etc.) and the redevelopment of the town undermined their sense of bearings and their sense of belonging.
- Many people report negative psychosocial effects related to increased consumption (e.g., drugs and alcohol, material goods), social conflict, social divisions and ostracization.
- Many people seem resigned to quietly tolerating the situation because they feel powerless to change it and want to keep the peace at the personal and family levels. A number of them talked about the disappearance of local leadership and passivity with respect to the mining company. A climate of mistrust seems to have taken hold, with the mine a “taboo” topic of conversation and debate.

These effects seem to vary over time, particularly in relation to:

- Phases of the mining project (e.g., announcement, relocation, construction, startup)
- Adjustments made by the mining company over time (e.g., noise mitigation measures)

- Adaptation by town residents (e.g., relocation outside of the town)
- External circumstances (e.g., provincial and municipal elections; change in mine ownership).

Adverse effects

The study shows that mining operations have adverse effects on health due to dust, vibrations, blasting, increased traffic and noise. Dust is the leading cause of disturbance. It is also a cause of serious concern about the present and future health of residents, especially those who are more fragile.

Risk management

The study provides an overview of opinions about risk management, which are unanimously held by all categories of respondents. Until August 2013, Québec public health guidelines for risk management (Ricard, 2003) were not fully implemented with respect to transparency, openness, fairness and caution.

- Although a few people said they were satisfied with the information received, most felt that information was insufficient, incomplete, unclear, or not fully disclosed.
- Interviewees noted a lack of openness to different points of view, a failure to listen on all sides and shortcomings in local democracy.
- Given that the mine is the largest open pit gold operation in Canada, all participants felt that greater precautions should be taken regarding standards and monitoring. Given the limited means available to government and local groups, their ability to ensure this principle was called into question.
- During the study period (August 2012 to August 2013), participants unanimously perceived a lack of fairness and neutrality on the part of municipal authorities. Although some participants explained that this position reflected a desire to ensure Malartic’s survival, most respondents felt that the well-being of residents had not been adequately protected.

Future outlook

Residents interviewed had different views about the future of their community. A small number were positive or neutral about Malartic's development, but the vast majority were pessimistic. After the mine closes, they anticipate that their community will be worse off than before the mining project was announced in 2006. They see an absence of preparation and planning on the part of individuals, organizations and the municipality, which adds to their concerns. They would like to see:

- Sounder, more proactive management and better planning
- Less dependence on the mining company
- More empowerment of residents to take their future in hand
- A serene climate of openness and dialogue.

They also feel that the experiences of Malartic residents should serve as a lesson for similar situations elsewhere.

Conclusion

Mining and community development are dynamic processes. The results presented here provide a portrait of the situation up until August 2013. Monitoring of the psychological and social effects will allow these observations to be adjusted over time.

The study identifies current effects of the mine, both positive and negative, along with future risks. These effects correspond with the findings in the extensive scientific literature on the psychosocial impacts of mines (Brisson et al., 2014) as well as previous studies in Malartic (LeBlanc et al., 2012). These effects are not inevitable. As in other environmental situations, the assessment of potential social impacts (Bouchard-Bastien et al., 2013; Carrington and Pereira, 2011), proper planning and transparent, open, fair and cautious management of risks can prevent or mitigate many of the psychological and social impacts.

For now, the study shows that the perceptions, experiences, concerns and expectations of a significant portion of residents were not sufficiently accounted for during the period that ended in 2013.

Lastly, the review of psychological and social effects experienced by the residents of Malartic between the moment the mining project was announced (2006) and the first years of operation (2013) will serve as a basis for better planning the management of social risks in similar projects.

References

- BOUCHARD-BASTIEN, E., BRISSON, G. and GAGNÉ, D. (2013). Guide de soutien destiné au réseau de la santé : l'évaluation des impacts sociaux en environnement. Québec: INSPQ. 64 p.
- BRISSON, G., K. DUBÉ, F. TAIROU and M.-C. GERVAIS (2014). "Impacts psychologiques et sociaux des mines uranifères sur les populations avoisinantes," in D. Phaneuf (ed.), *Les impacts sanitaires en lien avec les projets uranifères nord-côtiers*. Québec, Institut national de santé publique du Québec, p. 161-206.
- BUREAU D'AUDIENCES PUBLIQUES SUR L'ENVIRONNEMENT (2009). *Rapport 260. Projet minier aurifère Canadian Malartic. Rapport d'enquête et d'audience publique*. Québec, Bureau d'audiences publiques sur l'environnement.
- CARRINGTON, K. and M. PEREIRA (2011). "Assessing the social impacts of the resources boom on rural communities," *Rural Society*, Vol. 21, No. 1, p. 2-20.
- FRANKS, D. (2012). Social impact assessment of resource projects. Crawley (Australia), International Mining for Development Centre.
- LEBLANC, P., H. ASSELIN, B. BUSSIÈRE, I. DEMERS, A. ÉPENDA, A. GAGNON and L. PELLETIER (2012). *Transformations et bouleversements d'un territoire : le cas de la municipalité de Malartic. Résultats d'une enquête sur la qualité de vie*. Rouyn-Noranda, Chaire Desjardins en développement des petites collectivités, Université du Québec en Abitibi-Témiscamingue.
- MOLINER, P., P. RATEAU and V. COHEN-SCALI (2002). *Les représentations sociales : pratiques d'études de terrain*. Rennes, Presses universitaires de Rennes.
- RICARD, S. (2003). *Cadre de référence en gestion des risques pour la santé dans le réseau québécois de santé publique*. Québec, Institut national de santé publique du Québec.

Individual and Social Effects of Changes Related to the Resumption of Mining Activity in Malartic: 2006–2013

AUTHORS

Geneviève Brisson, Researcher (Anthropologist), Direction de la santé environnementale et de la toxicologie, Institut national de santé publique du Québec
Catherine Morin-Boulais, Anthropologist, Department of Anthropology, Université Laval

Emmanuelle Bouchard-Bastien, Scientific Advisor, Direction de la santé environnementale et de la toxicologie, Institut national de santé publique du Québec

AS PART OF THE STUDY "PERSPECTIVES DE SANTÉ PUBLIQUE SUR LA MINE OSISKO : VOLET SANTÉ SOCIALE," DIRECTED BY

Geneviève Brisson, Researcher (Anthropologist), Direction de la santé environnementale et de la toxicologie, Institut national de santé publique du Québec

WITH THE COLLABORATION OF THE MEMBERS OF THE RESEARCH TEAM

Sabrina Doyon, Professor, Université Laval
Richard Martin, Scientific Advisor, Institut national de santé publique du Québec
Marie-José Fortin, Professor, Université du Québec à Rimouski
Patrice LeBlanc, Professor, Université du Québec en Abitibi-Témiscamingue
Hugo Asselin, Professor, Université du Québec en Abitibi-Témiscamingue
Mary Richardson, Anthropologist, Institut national de santé publique du Québec
Paul-Georges Rossi, Scientific Advisor, Ministère de la Santé et des Services sociaux
Stéphane Bessette, Scientific Advisor, DSP de l'Abitibi-Témiscamingue
Frédéric Bilodeau, Scientific Advisor, DSP de l'Abitibi-Témiscamingue
Réal Lacombe, Director of Public Health, DSP de l'Abitibi-Témiscamingue
Éric Lampron-Goulet, Medical Assistant, DSP de l'Abitibi-Témiscamingue

TRANSLATION

David Hagen, Anglocom

The translation of this publication was made possible with funding from the Health Canada.



This document is available in its entirety in electronic format (PDF) on the Institut national de santé publique du Québec Web site at: <http://www.inspq.qc.ca>.

Reproductions for private study or research purposes are authorized by virtue of Article 29 of the Copyright Act. Any other use must be authorized by the Government of Québec, which holds the exclusive intellectual property rights for this document. Authorization may be obtained by submitting a request to the central clearing house of the Service de la gestion des droits d'auteur of Les Publications du Québec, using the online form at <http://www.droitauteur.gouv.qc.ca/en/autorisation.php> or by sending an e-mail to droit.auteur@cspq.gouv.qc.ca.

Information contained in the document may be cited provided that the source is mentioned.

Legal Deposit – 2nd quarter 2016
Bibliothèque et Archives nationales du Québec
Library and Archives Canada
ISBN: 978-2-550-75324-7 (PDF)

© Gouvernement du Québec (2016)

Publication N°: 2115