

MARKETING ONTARIO'S SUCCESS IN MINE REHABILITATION¹

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Abstract. This paper presents a case study to demonstrate how success in mine rehabilitation can be marketed to the public at large. The paper is organized into four parts. First, it provides an overview of mine rehabilitation in Ontario, both past and present, and profiles examples of corporate stewardship. Current regulations and government and industry roles and responsibilities are discussed. Second, it presents the Rehabilitated Mine Lands Calendar 2006, a public awareness tool which profiles 12 rehabilitated mines in Ontario. The process of producing and distributing the calendar, including multi-jurisdictional collaboration, is highlighted and critical success factors are presented. Third, findings from the calendar feedback are analyzed to measure the calendar's success and evaluate public perception and knowledge of mine rehabilitation. Finally, lessons learned and ideas for future rehabilitation marketing tools are discussed.

Introduction

Definition of Rehabilitation

In the context of this paper, rehabilitation is defined as the restoration or return of mined land to a natural state or transformation to an alternative, productive land use. It requires a great deal of expertise, labour and materials in order to mitigate or remove health and safety hazards to the public and reduce impacts on the environment. The knowledge and expertise developed through rehabilitation work can then be exported to other projects, communities, provinces and countries, providing positive economic impacts to the community. Mined lands that are rehabilitated to alternate uses, such as a fish farm or golf course, also continue to provide employment and economic benefit to the community.

Mine Rehabilitation in Ontario

For the majority of the history of mining in Ontario, it was common and legal practice for mining companies to walk away from sites which had ceased to be profitable. Some of the abandoned sites in Ontario are more than a century old and many that were not closed in accordance with today's standards have become health and safety and environmental hazards. This has led to legacy issues and poor public perception of the mining industry in general and specifically in relation to environmental concerns. By the mid 1980's, the Ontario public demanded higher standards for mine closure and rehabilitation.

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Mine operators now go to great lengths to ensure environmental mitigation and rehabilitation of their properties. They practice progressive rehabilitation³ throughout the life cycle of their mines. Innovative new technologies and treatments are developed, occasionally in conjunction with local universities, and employed in the rehabilitation process. For example, professors and graduate students from Laurentian University in Sudbury partnered with Inco Ltd. to rehabilitate the central tailings drainage channel at the Copper Cliff site. Their approach used paper industry by-products to transform the once barren mine site into a vibrant marshland.

In addition to industry's commitment to rehabilitation to their current sites, the Ontario Ministry of Northern Development and Mines⁴ is addressing the legacy issues of the abandoned sites in Ontario. In 1999, the Ministry introduced the Abandoned Mines Rehabilitation Program. This program funds technical assessments and rehabilitation work on those abandoned sites which have reverted to the Crown. As of 2005, \$48 million had already been spent on rehabilitating abandoned mine sites in Ontario, and the government had established sustained funding of \$10 million annually for the program.

Regulations

Regulations relating to mine rehabilitation in Ontario have only been in place for the past fifteen years. Given the longevity of the mining industry, this is a relatively short period of time. Prior to these regulations being put in place, society accepted limited corporate responsibility for long-term environmental impacts as the status quo. It was common place for the Province of Ontario to acquire the liability for abandoned mine sites when the mined land reverted to the Crown.

Since the proclamation of Part VII of the Mining Act in 1991 and revisions in 1996, mine operators have been required to submit proper closure plans. These plans detail how, when and at what cost, rehabilitation of mines, mills and smelters will occur. Financial assurance is an integral part of the closure plan. The Mining Act requires that all mines be rehabilitated so that the site is restored to its former condition or a suitable alternative use. However, because these regulations are so new in the history of mining in Ontario, they are not common knowledge, and have not yet had much impact on the legacy issue of historic mining practices.

Roles and Responsibilities

Within mine rehabilitation in Ontario, there are two key players: the Ministry of Northern Development and Mines, and industry. Each has its own roles and responsibilities in ensuring that mined lands are rehabilitated.

The Ministry of Northern Development and Mines (MNDM) provides information and advice on permitting requirements, brings proponents together with all relevant ministries in the early stages of project planning, and advises and assists with public and First Nations consultation. The Ministry must ensure that mine sites are closed out in a manner consistent with sound environmental and public safety closure designs and limit accrual of public risk and liability; audit closure plans; monitor and inspect rehabilitation works; and ensure that compliance activities are undertaken as required. In addition to MNDM a number of other provincial and federal ministries/departments have regulatory requirements which must be met during rehabilitation.⁵

³ Progressive rehabilitation occurs outside the required mine closure plans and can prove to be more cost effective for mining companies by reducing their financial assurance requirements for closure planning. This is one way in which the Mining Act promotes good corporate stewardship.

⁴ The Ontario Ministry of Northern Development and Mines is the only regional ministry in the province of Ontario and plays a central role in northern affairs. The Ministry supports the mineral industry by providing it with valuable information about the province's geology. It also delivers and administers Ontario's Mining Act to improve the investment climate for mineral development.

⁵ Ministry of the Environment, Ministry of Labour, Ministry of Natural Resources, Fisheries and Oceans Canada and Environment Canada.

Industry must create and document the closure plan to the standards set out in the regulations; certify many of the specific requirements of the closure plan; conduct public notice and consult with leaders of affected aboriginal peoples; have the completed closure plan reviewed by MNDM and circulated to other ministries and agencies, some federal departments and agencies, affected municipalities and affected aboriginal communities; and undertake ongoing environmental monitoring after rehabilitation.

Mining communities also play an important role in rehabilitation. They are consulted during mine planning and are always able to comment on mining activities. In terms of rehabilitation, the most important role the community plays is voicing their desires for the ultimate end use of the mined land. The community may request natural areas or alternate uses such as tourism attractions which can provide economic benefit to the community.

Rehabilitated Mine Lands Calendar 2006

Background

The idea for the Rehabilitated Mine Lands Calendar came from the Ontario Public Service (OPS) Ideas Campaign⁶. The calendar was sponsored by the Ontario Mineral Industry Cluster Council (OMICC)⁷ and was a large, multi-faceted, multi-jurisdictional collaborative initiative, the first of its kind for Ontario. The calendar featured 12 success stories of rehabilitated mine sites in Ontario. Major mine operators funded the initiative and in-kind support was provided by the Ontario Mining Association, Aggregate Producers Association of Ontario and Cambrian College. A working group made up of industry, associations and ministry staff guided the project, with the Ministry's Executive Projects Office providing overall project management support.

The purpose of the calendar was to raise awareness of the quality of land rehabilitation undertaken by the mining industry in Ontario; position the industry as a good corporate citizen who operates to the highest standards; and raise awareness that the mining industry contributes greatly to the economy and quality of life in Ontario.

The project funding partners requested that a mechanism be developed to measure the calendar's impact in terms of meeting the above stated objectives. They also wanted to ensure the project's longevity in terms of maximizing their investment beyond the one year of the calendar. To measure the impact of the calendar, in terms of meeting its Objectives i.e. raising awareness of land rehabilitation, the mining industry contribution, etc., a feedback form was inserted in the calendar. The form included instructions for fax-in and the option of visiting the OMIC website to complete an online form. The feedback form was designed to assess public perception of the mining industry and rehabilitation work as well as to obtain direct feedback on the calendar. To address project longevity, a digitized version of the calendar has been posted on the Ontario Mineral Industry Cluster (OMIC) web site www.omicc.ca. The digitized version is currently available for 2006 and will be updated for 2007 and 2008.

⁶ The OPS Ideas Campaign, held in December, 2004 was a forum for Ontario Public Service employees to submit ideas to improve service delivery and achieve results in Ontario government.

⁷ Recognizing the importance of the mineral industry cluster to the Ontario economy, the Government of Ontario announced the formation of the Ontario Mineral Industry Cluster Council (OMICC) on November 13, 2003 and appointed the members of the OMICC on February 26, 2004. The Council Members come from the mineral industry, educational and vocational institutions, labour, Aboriginal organizations, environmental groups, mining equipment suppliers and municipal, provincial and federal governments. The Council is co-chaired by George Pirie, President and CEO of Breakwater Resources and Warren Holmes, CEO of Nuinsco Resources. The Deputy Minister of Northern Development and Mines, Sue Herbert, and Assistant Deputy Minister of the Mines and Minerals Division, Christine Kaszycki, are standing members of the council.

Distribution

During December 2005, 200,000 copies of the calendar were distributed in Ontario. The calendar was distributed to citizens across Ontario via insert in newspapers as well as through public libraries, chambers of commerce, high schools, colleges/universities and aboriginal organizations. The calendar was also distributed to government, industry and organizations such as environmental groups.

The calendar was displayed and distributed at a number of related events including the Ontario Exploration and GeoScience Symposium, Boreal Prospector's Symposium, Prospectors and Developers Association of Canada Conference, World Mines Ministries Forum, Northwestern and Northeastern Ontario Mines and Minerals Symposiums, and Mining in Society Conference.

Beyond the planned distribution, requests for additional copies of the calendar came in from numerous interested parties across Ontario, as well as from industry and government in Alberta, British Columbia, Nova Scotia, and the Yukon.

Critical Success Factors

Many factors contributed to the success of the calendar. They can be generally categorized into approach/process and tools. In the approach and process, likely the most important critical success factor was securing the early engagement of industry and associations. From there, a working group was established, which provided insights, content and a liaison role to the company or organization they were representing. This group was supported by the Executive Projects Office at the Ministry of Northern Development and Mines, which played a coordinating role.

Tools such as a sound business case and project plan guided the project and contributed to its success. In addition, the retention of a world-renowned photographer who has worked extensively in the mining industry, and a design company who understood the vision of the calendar, ensured its aesthetic appeal and public appreciation.

Calendar Findings

Feedback

Over 130 written and verbal responses were received from the locations across Ontario where the calendar was distributed. The vast majority of feedback received was very positive, with many individuals venturing beyond the structured questions on the feedback form to include personal stories such as family ties to the industry and ownership of property near rehabilitated sites. A number of comments were related to improvements to the calendar, and ideas for future projects. Questions were posed relating to specific sites that respondents had some personal experience with. Finally, a large number of respondents expressed their sincere thanks for the production and receipt of the calendar, as well as for the rehabilitation work that has been done. A "keep up the good work" sentiment, in relation to both the calendar itself and rehabilitation work in general, came through loud and clear from the feedback process.

Public Perception and Knowledge

Feedback received indicated that the calendar was helpful in improving public perception and knowledge of the mining industry and rehabilitation in Ontario. Many individuals indicated lack of previous knowledge regarding the scope of mining in Ontario and the variety of minerals that are mined in the province. It was also clear that the general public was largely unaware of the regulations and rehabilitation work carried out in the province, and the potential for mine sites to be rehabilitated to a natural state or alternative use. The feedback from the calendar made it abundantly clear that both industry and government need to do more to

promote and publicize both the regulations that govern rehabilitation, and the actual rehabilitation work that is done in the province.

Conclusion

Lessons Learned

The Rehabilitated mine lands calendar is one example of a vehicle for responding to the diverse need and desire to position the mining industry as a good corporate citizen who operates to the highest standards; as well as to raise awareness that the mining industry contributes greatly to the economy and quality of life in Ontario. The calendar addressed these concerns by raising awareness of the quality of land rehabilitation undertaken by the mining industry in Ontario. The calendar is proof that a collaborative initiative can be successful given the proper approach, process, tools and support. The comments and feedback received have highlighted that although the calendar was effective in meeting its objectives, there is still need and interest in doing more to improve the image and public awareness of the industry.

Feedback to the calendar has indicated that more awareness/outreach work by government and industry regarding roles, responsibilities and legislations related to mine closure and rehabilitation is needed and that further awareness tools should be developed.

Idea for future marketing tools

Though not specifically asked for, many ideas for future marketing tools were proposed through the calendar feedback. They ranged from television specials and large scale newspaper advertising to targeted education through a CD for use by schools and providing a field trip and lecture series for instructors from across Canada to visit and learn from the sites featured in the calendar. Similar products such as another calendar with a broader message and a book or CD following the same format were suggested. There was also interest in seeing the rehabilitated sites promoted as tourism destinations and a desire that rehabilitation be featured more prominently in publications that traditionally only focus on the technological and economic successes in mining.

The excitement and appreciation for the calendar and its subject matter evident in the above ideas, as well as the feedback in general and requests for additional copies, speak to the success of the Rehabilitated Mine Lands Calendar 2006 as a marketing tool for Ontario's success in mine rehabilitation. Based on the success of the 2006 calendar, discussions are now underway to explore the possibility of producing another calendar for 2007.

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