

## SOCIAL RESPONSIBILITY REPORT

## **Succeeding Together**



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## About this report

#### **APPROACH AND SCOPE**

In keeping with its commitment to regularly provide updated information on its activities, Canadian Malartic Mine (CMM) is pleased to present its *Social responsibility report*, *Succeeding Together*, the latest in a series of reports that have been released annually since Canadian Malartic Partnership acquired the mine in 2014.

The 2016 report is an update of health and safety, environmental and community activities for the year ending December 31, 2016. It highlights CMM's commitment to clearly communicate its approach to, and achievements and challenges in, advancing social responsibility company-wide.

#### **CHALLENGES FACED IN 2016**

In 2016, CMM continued efforts to improve coexistence in Malartic. CMM's team worked constructively to take up each challenge.



#### **STAKEHOLDERS**

This report is for all of CMM's stakeholders, which include current and potential investors, employees, the residents of Malartic and Rivière-Héva, municipalities, suppliers, government, media, community partners, First Nations, groups with an interest in our activities and members of the mining industry.

The results presented on the following pages are based on consultations conducted in a number of different ways with stakeholders throughout the year. Stakeholders, through their input and invaluable contribution, give a better understanding of their expectations and perceptions of the organization.

#### **GLOBAL REPORTING INITIATIVE (GRI)**

This report is based on internationally recognized corporate sustainability and social reporting recommendations, such as the G4 guidelines of the *Global Reporting Initiative* (GRI). These guidelines frame the reporting of specific information on the three main aspects of sustainable development (environmental, social and economic), as well as general information that enables each company to deal with important points specific to its activities.

#### SOCIAL RESPONSIBILITY REPORTING

The CMM team is responsible for preparing the 2016 Social Responsibility Report and ensuring the accuracy of the information it contains. The team believes that this information is a true reflection of its initiatives and performance results in the areas of sustainability and social responsibility over the past year. The content of this report was verified by Company authorities responsible for sustainable development, social responsibility and the disclosure of information.

The Canadian Malartic Partnership is striving to improve the Canadian Malartic Mine's *Social Responsibility Report*. Any concerns or comments about the report may be sent to the following email address:

🖂 info@canadianmalartic.com

The CMM website also contains information on topics of special interest.

www.canadianmalartic.com

## **A NOTE FROM MANAGEMENT**

n 2016, Canadian Malartic Mine continued to provide valuable benchmarks for fully incorporating social responsibility into its decisions, actions and processes. We are proud to set out in this report our values, our vision, our projects, our challenges, our ways and our accomplishments.

Since Canadian Malartic Partnership's creation in June 2014, we have focused our responsible management actions by striving to become a model organization. We see each challenge as an opportunity to move forward. Our innovative solutions in response to these challenges are a testament to our sincere commitment. Our shared achievements have shown us that the value we place on teamwork and cooperation with the community is deeply rooted. We have worked together to develop major projects and accomplished great things.

True to our values of integrity, listening, respect, openness, transparency and fairness, our organization distinguished itself through its innovative achievements on all fronts. In 2016, Canadian Malartic Mine was able to:

- Position itself as:
  - → A health and safety leader, by posting the best performance to date;
  - + An environmental leader, by constantly improving its environmental performance;
  - A community relations leader, by
    - implementing an unprecedented voluntary program after thousands of hours of consultation and work with the community, namely the Good Neighbour Guide on Impact Mitigation and Compensation and Property Acquisition in Malartic;
    - attaining 96% buy-in of the Guide among the residents of Malartic; and
  - working with citizens and stakeholders to develop needs-based agreements and solutions to continuously improve our practices; and
- Make a significant contribution to long-term development initiatives for the local community and the region.

Our team has proven that it is possible to be a major player while ensuring responsible development and operations. As we develop our expertise we will be able to seize more and more opportunities to contribute to positive innovations. We continue to innovate and move forward while always being bold and transparent as we carry out our business in order to have the best health and safety, environmental and social practices. Our aspirations and determination to provide collaborative leadership will never cease to motivate us.

We would like to thank all Canadian Malartic Mine employees for their enthusiasm and determination, two qualities that are a tremendous source of inspiration for us. We would also like to extend our gratitude to the contractors, shareholders, residents of the towns of Malartic and Rivière-Héva, the Canadian Malartic Monitoring Committee, Town Council and First Nations members. By working together we succeed together!



Surge Main Serge Blais

General Manager

### Search By working together we succeed together! "

- Serge Blais

## **Canadian Malartic Mine**

Canadian Malartic Mine, one of Canada's largest operating gold mines, represents a world-class deposit **estimated at almost 10,000,000 ounces of gold**. It is one of the world's largest producers of pure gold.

The gold mine is located in the Town of Malartic, in the heart of Quebec's Abitibi Gold Belt. The property includes four former gold mines that were in operation from 1935 to 1983: Canadian Malartic Gold Mines, Sladen Malartic (Barnat Mines), East Malartic and Malartic Gold Fields. These four mines extracted 5.13 million ounces of gold from Malartic's underground.

The open-pit mine and the processing plant, built by Osisko Mining Corporation, went into commercial production in May 2011. In June 2014, Agnico Eagle and Yamana Gold acquired Osisko and formed Canadian Malartic Partnership to manage and operate the mine.



## Canadian Malartic Mine

#### MINING

Conventional open-pit mining was selected because of the deposit's low grade, its proximity to the surface and the extremely wide mineralized zones. Hydraulic shovels, a backhoe and wheeled loaders load the waste rock and ore, while a fleet of production trucks transport the waste rock to a waste rock pile and the ore to a crusher.

#### **ORE PROCESSING**

The ore is processed at the plant at an average rate of 55,000 tonnes of ore per day. The plant includes crushing equipment, thickeners, leach and gold adsorption circuits, electrolytic cells, a charcoal reactivation system used to collect gold and a detoxification unit for the tailings solution.

The gold bars are 45 to 65% pure.





Canadian Malartic Mine plans to extend the Canadian Malartic pit in order to prolong the mine's life by mining new areas. The project involve deviating a section of Highway 117 and extending the Canadian Malartic pit.



#### **DESCRIPTION OF THE DEVIATION**

Operations in the Canadian Malartic pit, and more specifically in the Barnat sector, require that a stretch of Highway 117 – most of it situated on the projected pit's future footprint – be relocated. CMM, the ministère des Transports, de la Mobilité Durable et de l'Électrification des Transports du Québec (MTMDET) and the Town of Malartic have been working together since 2009 to design a road layout that will favourably address various parties' concerns.

#### DESCRIPTION OF THE CANADIAN MALARTIC EXTENSION

The Barnat and Jeffrey deposits, located northeast and east of Canadian Malartic's current open-pit mine, respectively, can be mined in an economically viable manner.

After mining activities have ceased, the projected Canadian Malartic pit will run mainly along a west-east axis. It will be approximately 3,750 m long, no wider than about 900 m and an average of 410 m deep. The leffrey pit will also be operated as an open-pit mine. It will be 525 m long and 309 m wide.

## HIGHLIGHTS

### of the Deviation





**365 M** will be added to the initial layout

TRANSIT TRAFFIC WILL CONTINUE TO FLOW THROUGH DOWNTOWN MALARTIC

The road layout will be planted and revegetated

The ATV path will be

members of a local ATV club

redesigned with

#### A landscape noise barrier will be created between the detour

road and Champlain Avenue

#### The city bike path

incorporated into the municipal network will be preserved



Costs will be fully covered by Canadian Malartic Partnership



Safety on the stretch of road will be **optimized** and passing zones maximized

## HIGHLIGHTS of Malartic Extension Project

Mine operations will continue for h an estimated **MORE YEARS** 



More than 1,250 jobs will be maintained annually

(for mine operations)

#### THE LOCAL AND REGIONAL GOODS AND SERVICES PROCUREMENT **POLICY WILL BE MAINTAINED**



in economic benefits will be generated annually, mostly in the Abitibi-Témiscamingue region



Investments will total

At least **160 additional jobs** will be created for the deviation of Highway 117



#### MALARTIC EXTENSION PROJECT ENVIRONMENTAL ASSESSMENT PROCESS

The Bureau d'audiences publiques sur l'environnement (Quebec environmental public hearing board - BAPE) held two sets of hearings in 2016: one from June 14 to 16, and the other on July 12 and 13. The first set of hearings gave the general public and parties with an interest in our operations an opportunity to ask questions about the project. All were invited to come before the Commission during the second set of hearings when more than one hundred briefs were filed, including 47 that were presented by their author. CMM's team took the time to read all comments and recommendations made by residents and various organizations alike.

The BAPE filed its report of recommendations with the ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) on October 5. The Ministry released the report on October 14. CMM reviewed with interest the report, which recommended that the government approve the project under certain conditions.

The Government of Quebec handed down its decision to authorize the Malartic Extension Project on April 19, 2017.

#### COMMITMENT

As part of the Malartic Extension Project, CMM reaffirms its willingness and strong commitment to complete an environmentally friendly project that respects the community and all of its partners, with the goal of ensuring sustainable operations while minimizing their impact. This vision is implemented by applying a rigorous operations management and monitoring system and adequate and effective mitigation and compensation measures. CMM is committed to regularly informing the residents of Malartic and the region of this project's steps. Various follow-up mechanisms are in place – such as a dedicated information officer, door-to-door community information campaigns and an *Info-Travaux* hotline – to regularly inform citizens about the project's next steps.

Our team conducted an in-depth analysis of each recommendation made by the commissioners in order to address them as best possible and enhance the project, for the benefit of the entire community. Several actions have been taken in the past two years to significantly improve our environmental performance and community relations and we intend to continue our activities with the same determination and the same objective. The *Social Performance* section of this report examines the Malartic Extension Project activities that were held in 2016.

We welcome your questions on the Malartic Extension Project: Questionsprojetmcm@canadianmalartic.com





## **OUR GOVERNANCE** In search of the common good

CMM is a general partnership that is indirectly held by Agnico Eagle Mines Ltd. and Yamana Gold Inc. Each of these Canadian corporations, which are headquartered in Toronto, controls 50% of CMM's shares.

CMM's activities are led by an eight-member Management Committee consisting of four members from each parent company. The Committee is determined to comply with the strictest governance standards in all aspects of the organizations affairs. The Committee plays a key role in protecting stakeholders' interests, maximizing their respective shareholder value and implementing practices that meet ethical standards.

## OUR GOVERNANCE





#### **MANAGEMENT COMMITTEE**

YAMANAGOLD

4 members from AEM 4 members from YRI

#### **OPERATION COMMITTEE**

Christian Provencher, Vice-President, Canada, AEM Yohann Bouchard, Senior Vice-President, Operations, YRI

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**CANADIAN MALARTIC MINE** Serge Blais, General Manager



**Figure 1 :** Simplified Governance Structure of Canadian Malartic Mine

## OUR APPROACH TO SOCIAL RESPONSIBILITY



## OUR APPROACH TO SOCIAL RESPONSIBILITY

### **Rock-solid Pillars and Principles**

CMM takes very seriously the implementation of its social responsibility approach, closely monitoring action plans in real time.

Every daily act or intervention is based on a three-tiered decision-making pillar that is consistently followed, without interpretation. It is much more than a simple guideline; it is a code of conduct that must be followed by each and every CMM employee. Below are the decision-making pillar's three tiers:



Our organization has used this approach to significantly improve its ways. Improvements include:

Working closely with our suppliers, we continued to develop innovative mitigation measures that help to improve our environmental performance and ensure the neighbouring community is respected. We develop opportunities to always do better through numerous R&D efforts and by seeking optimum solutions.

In consultation with the community, we have created opportunities to enrich the understanding of the issues, identify the heart of problems and suggest concrete solutions. We ensured a climate openness and collaboration by being receptive to others' points of views, opinions and experiences.

We maintain an honest, transparent and sincere dialogue with all of our stakeholders. Our commitment to do it right helps to build trust with our stakeholders.

This decision-making pillar complements the values that guide CMM's decisions, management and activities:

- → Ensuring the safety or our employees
- ➔ Respecting the environment
- Developing our employees
- ➔ Contributing to the community
- ➔ Realizing our potential for growth
- → Increasing the value for our partners





### **OUR SUSTAINABLE DEVELOPMENT POLICY**

Operating in a sustainable manner is an integral part of Canadian Malartic's business strategy. We strive to create value for our shareholders and partners while contributing to the prosperity of our employees and our host communities. We believe that through ongoing dialogue with our employees and stakeholders, a commitment to legislative compliance and a strong focus on continuous performance improvement, we will gain and maintain our social licence to operate and enhance our ability to develop new resources. This sustainable development vision is managed through the application of a Safety, Health, Environment and Community (SHEC) management system and translates into the following commitments:

#### **SAFETY AND HEALTH**

We are committed to operate a safe and healthy work place that is injury free by:

- A → Using sound engineering principles in the design and operation of our facilities;
- B → Providing appropriate health and safety training to employees and contractors;
- C → Ensuring that effective occupational health and industrial hygiene programs are in place;
- D → Performing internal and external safety audits to review and establishing plans to improve performance;
- E Assessing risk on a regular basis and investigating incidents in order to identify and minimize hazardous conditions and ensure that appropriate controls are in place;
- $F \rightarrow$  Implementing emergency response plans to manage the effects of unforeseen events; and
- G → Providing adequate resources and appropriate tools to carry out the work safely and efficiently.



#### **ENVIRONMENT**

We are committed to minimizing the effects of our operations on the environment and maintaining its viability and diversity by:

- A > Making efficient use of natural resources including water and energy;
- B → Minimizing the footprint of our activities and emissions to air, water and land, including waste generation;
- C → Managing tailings, waste rock and overburden to ensure long term environmental protection;
- D → Assessing risk on a regular basis and investigating incidents in order to reduce the potential for environmental impact;
- E 
  Performing internal and external environmental audits to review and establishing plans to improve performance;
- F → Implementing measures to reduce greenhouse gas emissions and address climate change;
- $G \Rightarrow$  Implementing emergency response plans to reduce impacts of unforeseen events;
- H → Integrating biodiversity conservation and land use planning considerations through all stages of business and production activities; and
- Rehabilitating sites to ensure physical and chemical stability in consultation with the communities and where possible through progressive rehabilitation.



#### SOCIAL RESPONSIBILITY AND COMMUNITY

We are committed to the social and economic development of sustainable communities associated with our operations and to a fair and respectful relationship with our employees and external stakeholders by:

- A > Fostering an open, transparent and respectful dialogue with employees and external communities of interest:
- **B** > Treating all employees and contractors fairly, providing equal opportunity at all levels of the organization without bias;
- $( \rightarrow )$  Employing and promoting employees on the basis of merit;
- $D \rightarrow$  Ensuring that no discriminatory conduct is tolerated in the workplace;
- **E →** Providing fair and competitive compensation;
- **F** > Implementing an employee grievance mechanism and a community response mechanism:
- **G** > Enforcing a drug and alcohol-free workplace;
- H > Contributing to the socio-economic development of our host communities by investing in local community initiatives in the areas of health and education, and in projects contributing to their long term socio-economic sustainability;
- Contributing to the economic development of our host communities by creating jobs and promoting local purchases;
- → Upholding fundamental human rights and respect of cultures, customs and values of all affected by our activities;
- **K** Providing assurance that our operations will not support, benefit or contribute to unlawful armed conflict, serious human rights abuses, or breaches of international humanitarian law; and
- Building long term relationships with local Aboriginal communities.







### **OUR TEAM Working to Succeed Together**

#### DISTRIBUTION OF 694 EMPLOYEES **BY GENDER**



Operating one of the largest open-pit gold mines is not without its challenges. Our employees' collective expertise, their passion and their commitment to success are clearly one of our greatest assets.

CMM is the largest private employer in the RCM of Vallée-de-l'Or, with almost 1,400 people working on its site. Our team included 694 employees and nearly 700 contractors in 2016. Our employees work in such fields as planning, operations, maintenance, engineering, ore processing, procurement, administration, human resources, environment, health and safety, finance, IT, community relations and communications. Of CMM's 694 employees, 11% are women and 89% are men.

CMM recognizes the contributions of its First Nations employees, who make up almost 2% of our team.

CMM also recognizes women's contributions to the mining sector. As part of International Women's Day on March 8, 2016, CMM took part in a video campaign launched by the Institut national des mines du Québec in collaboration with the Quebec Mining Association (QMA), CSMO Mines and the Quebec Council on the Status of Women by posting a video introducing Renée Dupéré, Metallurgical Coordinator at CMM. Renée spoke about her work experience in the mining industry and the sector's challenges and opportunities. View the clip here: http://bit.ly/2rbelv9.





0 **Grand Malartic** Other towns in (Malartic, Rivière-Héva, Abitibi-Témiscamingue Abitibi-Témiscamingue Dubuisson)

> MEN WOMEN

Outside



Figure 2 : Canadian Malartic Mine's Workforce

	Number of Women	Number of Men	Women / Men Ratio
es	53	148	26% / 74%
es	25	468	5% / 95%
4L	78	616	11% / 89%



029

#### **NEW HIRES**

Of the 694 people employed by Canadian Malartic Mine, 48 were new hires in 2016.





# Fig.3

Figure 3 : New Hires

#### MANAGEMENT

Quebeckers make up 100% of CMM's Management Team: 88% hail from the Abitibi-Témiscamingue region, 11% are women and 89% are men. CMM's disciplined and forward-looking team of seasoned individuals is attuned to the realities and issues of particular concern to Quebec and adopts best management practices.







Figure 4 : Distribution of Employees within the Organization's Governance Bodies by Age

#### **PROMOTE EMPLOYEE INVOLVEMENT**

For CMM, maintaining a stimulating work environment and a positive employee experience is vital.

#### **Employee Training:**

Although our operations require our employees to constantly learn and innovate, training is especially important to us. Training allows employees to excel at their duties and prepare to take on other future responsibilities within the Company. In 2016, we invested the equivalent of at least 1% of the payroll in training activities designed to develop our employees' skills. Our employees received a total 26,105 hours of training or an average of 37 hours of training per employee.

#### **EMPLOYEE COMPENSATION**

Salaries and benefits totalling \$92 M were paid out in 2016.

<b>Current Hourly</b>	<b>Canadian Malartic</b>
Minimum Wage in	<b>Mine Entry Level</b>
Quebec	<b>Hourly Wage</b>
(at May 1, 2016)	( December 2016 )
\$10.75	\$28.51



**Table 1 :** Employee Trainingby Job Category

<b>26,105 HOURS</b> Total number of employee training hours		
Management Employees	Hourly-rated Employees*	
7,254 hours	18,851 hours	
of training	of training	
38 hours	36 hours	
of training on average	of training on average	

\* Employees working shifts in production-related positions.



#### **PERFORMANCE EVALUATIONS**

Providing our employees with the means they need to reach their career goals is essential. With this in mind, each management employee undergoes an annual performance evaluation that includes a meeting during which individual goals are set. These meetings promote dialogue between supervisors and management employees, provide for concrete steps to ensure goals are reached and determine training needs. Our management employees appreciate this procedure that significantly enhances their professional development.

#### **EMPLOYEE BENEFITS**

Life and short- and long-term disability insurance is provided to personnel, in addition to health, drug, dental and vision insurance.

#### **EMPLOYEE SHARE PURCHASE PLAN**

All full-time employees are eligible for the Employee Share Purchase Plan, which enables them to earn income tied to the market value of shares in both parent companies. CMM's contribution is equal to 50% of employees' contributions.



\$2.65



Table 2 : Current Minimum WageCompared to Canadian MalarticMine's Entry Level Wage

#### **RETIREMENT PLAN**

All our permanent employees are automatically eligible for our retirement plan that allows them to make informed savings choices so that they can plan their financial future. Employee contribution rates range from 1% to 5.5% of their salary and the Company's contribution is equal to the employee's. A minimum 1% contribution is mandatory to ensure the future financial security of all our employees.

#### **PARENTAL LEAVE**

Forty-five (45) employees took parental leave in 2016: 39 men and 6 women. Of these employees, 33% of the women and 87% of the men had returned to their positions on December 31, 2016.

#### **EMPLOYEE REPRESENTATION**

Our *Comité Bonne Entente* (Harmony Committee), made up of employees and managers, is a forum for sharing that aims to improve the understanding of employees' concerns and to work collaboratively to improve and maintain good labour relations. The Committee embraces the values of listening, collaboration and respect. Twelve (12) meetings were held in 2016.

#### **EMPLOYEE ASSISTANCE PROGRAM**

CMM provides its employees with a free and confidential Employee Assistance Program (EAP), which is an external consultation service designed for employees and their family members struggling with personal, professional, financial or health problems.

#### **IN-HOUSE JUNIOR ENGINEER DEVELOPMENT PROGRAM**

For CMM, all new junior engineers deserve special attention to maximize their integration into their new work environment and optimize their skills according to the Company's mission, values and needs. A program designed to provide professional guidance to all new junior engineers who recently completed their engineering studies is available for succession planning purposes and to maintain standards of excellence. Each junior engineer receives guidance from a mentor.

This 24-month program allows young engineers to work in the production, support and drilling departments. To guide junior engineers and help them achieve their identified objectives, the program operates in every field of activity: mining engineering, metallurgy, ore processing, mechanics, electricity and geology.

#### **COMPANY INTERNSHIPS**

In cooperation with various educational establishments, CMM offers internships opportunities to students enrolled in college or university studies pertaining to the mining industry. In 2016, we hosted about fifty students within our organization. A CMM internship lasts four months on average. A professional on our team supervises every trainee.

We consider internships an excellent opportunity for these students to get their feet wet in the labour market and gain real-life, hands-on experience. It also helps familiarize them with the local culture, clarify their career goals, develop a network of contacts and form ties with members of our team.

#### **CANADIAN MALARTIC MINE FAMILY DAY**

In the fall of 2016, CMM held its family day, a time when mine employees and their families are invited to tour the mine facilities, get an up-close look at the equipment in operation at our site, and drop by the various information booths staffed by employees from the various departments. Everyone, young and old, had a great time.







## HEALTH **AND SAFETY** PERFORMANCE

### The cornerstone of our activities

For CMM, maintaining the highest health and safety standards is an obligation that far exceeds mere compliance with the minimum measures required by law or regulation. Health and safety is central to all of our decisions and a Company value. With this in mind, we encourage proactive initiatives designed to ensure a safe work environment for one and all.

#### **PREVENTION PROGRAM**

CMM's prevention program basically aims to eliminate at source or control any risks to the health, safety, or physical well-being of our employees. Its specific objectives are:

- → Identify and assess any risks inherent in work procedures and the work environment:
- → Suggest effective and lasting technical and administrative control methods to ensure employee health and safety;
- → Adequately protect employees exposed to specific risks by establishing health and safety standards; and
- → Ensure the safe maintenance of personal and collective protective equipment; and train and inform employees and contractors about the risks involved in their work and work environment.

The prevention program consists in an action plan that is continuously improved to help managers, supervisors and Health and Safety Committee members carry out their mandate of protecting employees health and safety in a lasting way.

#### **HEALTH AND SAFETY COMMITTEE**

Employee participation is essential for an effective health and safety program. The CMM Health and Safety Committee is something of a forum for collaboration among workers and Company management. Within this Committee, employees' practical knowledge, managers' overall vision and the Company's general procedures make for a coherent whole. The Committee very specifically aims to prevent workplace accidents and illnesses. Its objectives, duties and meetings follow a well-established procedure. Each member is asked to contribute suggestions designed to improve working conditions from a health and safety perspective.

In 2016, the Health and Safety Committee was composed of:

- $\rightarrow$  a director;
- $\rightarrow$  four superintendents;
- $\rightarrow$  two general foremen;
- $\rightarrow$  one foreman: and
- $\rightarrow$  11 employees.

Members of this Committee comprise 2.7% of the total CMM staff.



#### EMPLOYEE AWARENESS

Health and safety is everyone's business. Our common goal is to raise awareness and cultivate a responsible attitude toward health and safety. Awareness among employees working on the CMM site is cultivated in different ways and using different methods. These include one-on-one and group meetings, information campaigns, posters and events. By sharing information, we hope to generate more knowledge of the dangers and encourage employees and contractors to adopt safe behaviours.

More than 400 official health and safety meetings were held with CMM employees in 2016. These meetings, led by supervisors, were specifically intended to raise employee awareness about their health and safety rights and responsibilities. These are special opportunities for discussion and communication among the Company's various elements (employees, supervisors and managers).

The role of each CMM supervisor is to:

- → inform employees about risks and dangers and address their concerns;
- demonstrate safe work methods to workers and ensure they obey the law as well as occupational health and safety policies and practices; and
- $\rightarrow$  ensure that employees wear and use appropriate protective equipment.

	DEPARTMENT	NUMBER OF MEETINGS HELD IN 2016
Tab.3	Plant	116
	Maintenance	79
	Mine	99
	Engineering	24
Table 7 - Number of Health and	Geology	46
Safety Meetings with Employees, by Department	Warehouse	22
	Environment	6
	Administration	12

Contractors held an average of 13 health and safety meetings a month. These meetings also aimed to raise workers awareness and ensure their compliance with the law and CMM policies.

#### TRAINING

Health and safety training starts as soon as an employee is hired. We believe accident frequency can be reduced by offering employees training geared to their duties. Through training, we aim to build on the skills required to make appropriate health and safety choices, and daily living choices.

Over the course of 2016, 2,472 people received introductory departmental health and safety training at Canadian Malartic Mine. This introduction covers the following items at a minimum, depending on the employees sector of activity:

Supervision form (worker's logbook)	🔶 E
Cleanliness poster	→ H
Emergency alarms	<b>→</b> T
Accident/incident notice	→ F
→ Lock-out	→ (
Mechanical inspection card	→ (
Health and Safety Committee	→ A
Communication (telephone, radio)	→ F
→ Weather	→ S
Mining conduits	→ F
Building description	<b>→</b> №
Drinking water	→ (
Safety signs and tape	→ H
Environment	→ [
General and special protective equipment (barness, visor, etc.)	→ V
Confined spaces	<b>→</b> (
Smoking restrictions	→ V
Act respecting occupational health and safety	→ H
$\rightarrow$ Act respecting occupational nearth and safety	<b>A</b> 14

HEALTH AND SAFETY TRAINING BY WORK LOCATION	NUMBER OF EMPLOYEES WHO RECEIVED TRAINING IN 2016	NUMBER OF Contractors who Received training In 2016
Mine	41	914
Plant	45	1 364
Construction	0	108

- Emergency mask
- Hoisting method
- Tidiness and cleanliness
- Health and Safety Policy
- Guard post
- On-site nurse
- Accident procedure
- Fire response procedure
- Specific work procedures
- Prevention program
- Mine regulations
- Compliance with plans and specifications
- Health/safety meetings
- Dining hall
- WHMIS
- On-site parking and traffic
- Washroom
- Hot work and permits
- Worker visibility

Table 4: Number of people who took introductory Health and Safety training for Canadian Malartic Mine workers, by their work location

#### PROTECTION

CMM provides the protective clothing and equipment that each employee requires. We are also obligated to ensure that employees use and/or wear them.

#### **INSPECTION**

Employees and supervisors make daily inspections using the "worker logbook." This logbook is intended for employees and contractor employees working on the CMM site. When an employee's logbook includes a note about a given health and safety irregularity, the supervisor ensures that the comments are followed up and that the situation is monitored on a weekly basis. Supervisors and employees are responsible for immediately reporting any dangerous condition or action and for promptly taking the necessary measures.

Inspections are essential because they make it possible to:

- Become aware of employee concerns;
- Identify existing and potential hazards;
- Determine the causes underlying a hazard;
- Monitor the application of hazard control measures (personal protective equipment, technical measures, policies, procedures); and
- → Recommend corrective action.

#### **ACCIDENT INVESTIGATIONS**

A total of 31 accidents and incidents were investigated in 2016. Of that number, 12 concerned employees and 19 concerned contractor employees.

#### **HEALTH AND SAFETY AUDIT**

Health and safety advisors and the Health and Safety Committee conducted 210 internal audits in 2016. In addition to these audits, more than 126 one-time and specific observations were made by the Supervisors' team in 2016.

#### **HEALTH AND SAFETY STATISTICS**

In 2016, 161 accidents involving CMM employees and contractor employees were reported, up from 140 in 2015. The increase over 2015 reflects an increase in the number of hours worked and also the corporate culture, which encourages and calls on workers to report all incidents, even those with minor consequences. There were 17 lost-time and modified duty accidents in 2016.

#### **COMBINED FREQUENCY**

In 2016, our combined frequency (incidents involving lost time and modified duties) was 1.17. This figure has declined steadily since 2012.

No employee was directly or frequently exposed to specific occupation-related illnesses.

	2012	2013	2014	2015	2016
Total Number of Hours Worked	2,516,857	2,353,049	2,622,448	2,700,158	2,900,051
First Aid	106	101	66	98	98
Medical Treatment	22	22	42	25	46
Modified Duty (light duties)	34	23	16	10	7
Lost-time Accident	8	13	4	7	10
Death	0	0	0	0	0
TOTAL NUMBER OF REPORTED ACCIDENTS	170	159	128	140	161

**Comment:** Includes contractors' employees.





## Table 5: Health and Safety statistics

#### **AWARDS AND HONOURS**

#### Supervisors recognized for health and safety

At the workplace health and safety seminar held by the Quebec Mining Association (QMA) in September 2016, eighteen (18) Canadian Malartic Mine supervisors were honoured for leading their teams for 50,000 to 350,000 consecutive hours of work without any lost-time accidents.



Table 6 : Health and Safety Awards

DEPARTMENT	INCIDENT-FREE HOURS
Plant Maintenance	
3 supervisors	100,000
Plant Production	'
1 supervisor	50,000
1 supervisor	100,000
Mine Maintenance	
1 supervisor	100,000
1 supervisor	150,000
1 supervisor	200,000
Mine Production	
2 supervisors	50,000
2 supervisors	100,000
1 supervisor	150,000
2 supervisors	200,000
1 supervisor	350,000
Geology	
1 supervisor	100,000
Environment	
1 supervisor	50,000



#### **Occupational Safety and Prevention Team Achievements**

At the Abitibi-Témiscamingue occupational health and safety seminar held on October 25 and 26, 2016, by the Commission des normes, de l'équité, de la santé et de la sécurité du travail and the Centre intégré de santé et de services sociaux de l'Abitibi-Témiscamingue (CNESST), nine of our employees received certificates in recognition of their workplace safety and prevention accomplishments. Our team was also a "regional finalist" in the Innovation category. Research into best practices and new approaches are deeply anchored in our corporate culture and drive our team. We are committed to constantly conducting our operations in a way that ensures a healthy and safe work environment.





off work (average 63 days per

accident)

Comment: Includes contractors' employees.

modified duties (average 26.9 days)



Lost time rate

045



Employee health and wellness is important. All employees spend a considerable amount of time in the work environment, where they must be able to feel comfortable. We aim to strengthen our employees' sense of belonging in order to improve unity and stimulate their creative energy.

In the spring of 2016, CMM became a member of the *Groupe entreprises en santé* and established the *Comité santé & mieux-être* (Health and Wellness Committee). The Committee's goal is to promote organizational practices that foster workplace health. Its mandate is to act as a change agent by promoting and disseminating work/life balance best practices. It is composed of about ten employees from various Mine departments. It should also be mentioned that the Committee opened a fitness room for all CMM employees this year.

The Committee has taken on the following challenge for 2017: generate greater mobilization while promoting personal responsibility for health and wellness.



## SOCIAL PERFORMANCE



## SOCIAL PERFORMANCE

### Values showing the way

Transparency and collaboration with the local community are the guiding principles behind our actions. They are intricately woven into our vision of social responsibility. Since the introduction of the collaborative approach, we know that by working with parties interested in our activities we can successfully carry out major projects. Dialogue and attentiveness have enabled a better understanding of our stakeholders' concerns and expectations, and have created opportunities to improve our organization. Collaboration has definitely allowed for the development of simple, constructive and lasting relationships with the community and with all parties interested in our operations.









#### Table 7: Stakeholder Communications

In this regard, here are a few of the main information tools and discussion mechanisms we use to interact with our stakeholders.



and sms	Main themes in 2016			
	Community relations mechanisms			
	Collaborative approach			
	Good Neighbour Guide			
	Toxicology study			
	Study on impact of vibrations on buildings			
	Malartic Extension Project and environmental assessment procedure			
	Environmental, social, health and safety and economic performance			
	Practices and continuous improvement			
	Community relations mechanisms			
	Community involvement			
	Coffee meetings			
	Volunteer Program			
ic	Donation/Sponsorship Program			
	Good Neighbour Guide			
	Collaborative approach			
	Good Neighbour Guide			
	Malartic Extension Project and environmental assessment procedure			
	Environmental, social, health and safety and economic performance			
	Practices and continuous improvement			
	Collaborative approach			
	Good Neighbour Guide			
	Malartic Extension Project and environmental assessment procedure			
	Environmental, social, health and safety and economic performance			
	Practices and continuous improvement			

## Tab.7 (Cont'd)

#### Table 7: Stakeholder communications

Stakeholders	Communication tools and discussion mechanisms	Main themes in 2016
MINING INDUSTRY MEMBERS	<ul> <li>Information emails</li> <li>Newsletter</li> <li>Information letter</li> <li>Website</li> <li>Mine visits</li> <li>Information emails</li> <li>Meetings</li> <li>Negociation table</li> </ul>	<ul> <li>Collaborative approach</li> <li>Good Neighbour Guide</li> <li>Malartic Extension Project and environmental assessment procedure</li> <li>Environmental, social, health and safety and economic performance</li> <li>Practices and continuous improvement</li> <li>Growth projects</li> <li>Malartic Extension Project</li> <li>Donations and Sponsoships</li> <li>Employment</li> <li>Businness opportunities</li> <li>Collaborative approach</li> </ul>
GROUPS WITH AN INTEREST IN OUR OPERATIONS	<ul><li>Information emails</li><li>Newsletter</li><li>Website</li></ul>	<ul> <li>Collaborative approach</li> <li>Good Neighbour Guide</li> <li>Toxicology study</li> <li>Study on impact of vibrations on buildings</li> <li>Malartic Extension Project and environmental assessment procedure</li> <li>Environmental, social, health and safety and economic performance</li> <li>Practices and continuous improvement</li> </ul>
MEDIA	<ul> <li>News releases</li> <li>News conferences</li> <li>On-site mine visit</li> <li>Website</li> </ul>	<ul> <li>Collaborative approach</li> <li>Good Neighbour Guide</li> <li>Toxicology study</li> <li>Study on impact of vibrations on buildings</li> <li>Malartic Extension Project and environmental assessment procedure</li> <li>Environmental, social, health and safety and economic performance</li> <li>Practices and continuous improvement</li> </ul>



#### LISTENING TO BETTER ANALYZE AND RESPOND

CMM reviews the comments, suggestions and complaints it receives in order to better understand citizens' expectations and concerns. Complaints submitted directly to the Mine or through its toll-free number enable us to understand the substance of the issue, respond in a timely manner and ensure careful follow-up.

Our team also addresses citizens' concerns promptly, confidentially, thoughtfully and impartially. Complaint management mechanisms aim to:

- Provide citizens with a prompt response to complaints in keeping with established standards;
- Establish simple, effective mechanisms to properly manage citizens' complaints and comments; and
- Continuously improve CMM's work methods.

All complaints received are automatically recorded in the system to facilitate monitoring from their receipt to their settlement. Data entered in the system are compiled to produce weekly, monthly and annual reports. This approach allows us to analyze complaints based on their:

- substance;
- 🔶 type;
- source; and
- processing time.

Our team analyzes, comments on and makes recommendations concerning these reports. This management tool aligns perfectly with efforts to improve our practices.

The following table lists complaints submitted directly to CMM over the past five years. In 2016, all of the 104 complaints made by 13 citizens were examined. Only three were processed in early 2017 because they had been submitted in late 2016.



Table 8 : Record of ComplaintsReceived by the Mine

Type of Complaint	2012	2013	2014	2015	2016
Noise	13	5	7	58	42
Air Quality	5	0	3	10	1
Blasting	55	25	71	62	60
Other	3	1	3	4	1
TOTAL	76	31	84	134	104





#### **COLLABORATIVE APPROACH**

In May 2015, Canadian Malartic Mine embarked on a major public collaborative approach that is based on information and dialogue. Through collective work, several solutions were identified in order to eliminate, mitigate or compensate for the impact the mine's operations may have, and also to maximize benefits. Be it coexistence, environmental performance or communication, solutions aligned with the community's needs have been incorporated into an action plan that is accessible to everyone. All solutions have been analyzed and several were implemented immediately.

#### **Initial Objectives**

- Continuously maintain communication mechanisms to disseminate information and gather the concerns and comments of the citizens of Malartic and Rivière-Héva.
- Thoroughly assess our community liaison mechanisms for their ability to create constructive dialogue spaces and thus adjust our practices;
- → Work with local stakeholders affected by our operations and by the Malartic Extension Project to develop solutions to current and anticipated concerns; and
- Develop, through a participative process, an integrated good neighbour program to prevent and manage impacts.

![](_page_29_Figure_7.jpeg)

We made clear commitments to our stakeholders in order to overcome the challenges of each phase in the collaborative approach. Thus, we undertook to demonstrate:

- → Transparency
- Inclusiveness

Accessibility

Recognition

- Accountability
- → Leadership

#### PHASE 1 – SPRING 2015

Nine meetings were held with various stakeholders interested by our operations in order to present the approach and gather participants' comments and concerns:

- Canadian Malartic Monitoring Committee;
- Malartic Municipal Council;
- Rivière-Héva Municipal Council;
- Comité de citoyens de la zone sud de la voie ferrée de Malartic (CCZSVFM);
- Citizens of Malartic;
- RCM of Vallée-de-l'Or;
- → Regional and national interest groups; and
- Direction de la santé publique de l'A.T. and ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC).

#### **PHASE 2 - OCTOBER 2015**

A collaborative workshop that brought together citizens, experts, stakeholders and employees generated several solutions to improve our practices and enhance impact management. A total of 122 people took part in the workshop during which seven themes (identified during Phase 1) were discussed:

- $\rightarrow$  Air quality and dust;
- $\rightarrow$  Noise;
- $\rightarrow$  Road traffic and safety;
- Real estate values and resale potential;
- $\rightarrow$  Vibration and structural integrity;
- Physical and psychosocial health; and
- Community relations mechanisms.

![](_page_29_Picture_35.jpeg)

#### PHASE 3 – JANUARY 2016

The objective of Phase 3 was to work on the solutions put forward during the collaborative workshop. Working groups to explore issues considered a priority by citizens and other stakeholders – coexistence, health and air quality – were first put in place. At the same time, CMM developed an action plan to monitor work on the solutions proposed in Phase 2. All work aimed to continually improve the Company's practices, while contributing to the Town of Malartic's sustainable development.

The table of 23 proposed solutions and the project coordinating and monitoring table are presented below.

![](_page_30_Picture_3.jpeg)

#### Table 9 : Proposed Solutions

	PROPOSED SOLUTIONS	SHORT DESCRIPTION
1	Program to maintain home resale value	Compensate homeowners for homes sold at a loss due to the mine. E.g.: A home is appraised at \$100,000, but sells for \$80,000. Mine would compensate for the \$20,000 shortfall.
2	<ul><li>2.1 Study on the impact of mine operations on structures</li><li>2.2 Implement a compensation program</li></ul>	<ul><li>2.1 Study on the impact of mine operations on structural integrity.</li><li>2.2 Subsidy program to nip issues in the bud.</li></ul>
3	Establish criteria for a buffer zone	Create a compensation and acquisition zone.
4	Pay special attention to people living with chronic lung or heart disease, stress, etc.	Have compensation and acquisition programs give priority to people who have health issues. Have specialists for medical follow-ups.
5	Renovation subsidy program	Renovation assistance fund.
6	Downhill and cross-country ski recreational and tourism centre	Use the pit and waste rock piles to create a ski centre and water park at the end of the mine's life.
7	Program to maintain and increase the population	Home ownership / home exchange policy; contribute to economic development, the implementation of health services, etc.
8	Shift transportation to rail	Design an unloading area where freight can be moved from rail cars to trucks for delivery to the mine.
9	New mine access road	Modify the section of the intersection between LaSalle Street and Lac Mourier Road.
10	Work to reduce anger and frustration. Reduce social divide. Increase the happiness index. Group together various partners.	Create synergy, a group, and a coalition of groups in the interest of Malartic. Improve communication.
11	Add speed bumps at the end of LaSalle Street and the beginning of Lac Mourier Road	Slow down traffic at this intersection.
12	Draft a good neighbour protocol	To eliminate, mitigate or compensate for the mine's impact.
13	Spa and health centre	Relaxation and resource centre; could be added to a health centre.

	PROPOSED SOLUTIONS
14	Acquire homes
15	Improve the city: Make it attractive
16	Tailings management by conveyor (on rails or not) rather than by truck
17	Extend blasting duration to reduce the number of blasts or vibration
18	Urban landscape improvement program; green the city
19	Enhance the transparency of mine communications
20	Human resources team for residents
21	Activity to bring residents together
22	Residential and commercial renovation subsidy program
23	Change the negative perception of Malartic

#### SHORT DESCRIPTION

Develop a good neighbour protocol.

Enhance current infrastructure. Announce, upgrade, maximize, and develop.

Remove waste rock from the pit and transport by conveyor to the deposit area.

Extend blasting duration to reduce the number of blasts.

Plant trees, give trees to citizens, hydroseed, create a community garden, etc.

Be aware and have a better idea of the process for dealing with concerns. Do follow-ups.

Response team for various issues experienced by people that stem from the mine's impact. Examples of services: Psychologist, social worker, guidance counsellor, nurse, specialized entrepreneurs.

Hold free family activities to bring people together and reduce social differences.

Renovation fund.

Work on media, improve existing infrastructure, demolish or renovate old buildings, downtown commercial revitalization.

![](_page_31_Picture_0.jpeg)

![](_page_31_Picture_1.jpeg)

Monitoring Table

Approximately 91% of the 8 projects are completed.

PROJECTS	Associated Solutions	Related Themes	Deliverables
Malartic Working Group on Coexistence Issues	1, 3, 12, 14	<ul> <li>Noise</li> <li>Dust</li> <li>Vibration and structural Integrity</li> <li>Physical and psychosocial Health</li> <li>Real estate values and resale potential</li> </ul>	Guide / Protocol on Compensation and Acquisition
<b>EcoMalartic</b>	4, 6, 7, 10, 13, 15, 18, 20, 21, 23	<ul> <li>Physical and psychosocial Health</li> <li>Real estate values and resale potential</li> <li>Life after the mine</li> </ul>	Implement a sustainable development strategic action plan for the Town of Malartic
Community Enhancement Project	15, 18, 23	<ul> <li>Noise</li> <li>Dust</li> <li>Physical and psychosocial Health</li> <li>Real estate values and resale potential</li> </ul>	<ul> <li>Plant trees</li> <li>Carry out growth generating projects for the community</li> </ul>

Timeframe	Collaborators	Work Done	Next Steps
Spring 2016	<ul> <li>Mine*</li> <li>CMMC**</li> <li>Town***</li> <li>Citizens</li> </ul>	The Good Neighbour Guide on Impact Mitigation and Compensation and Property Acquisition in Malartic was implemented September 1, 2016	<ul> <li>November 2016 to April 2017: Monthly Review Commitee meetings (during the claim periods).</li> <li>January to March 2017: Registration for claims from July to December 2016.</li> <li>September 2017: Working Group meeting on feedback on the 1<sup>st</sup> year of the Guide's implementation.</li> <li>September 2019: Working Group meeting to review the Guide.</li> </ul>
TBD	City effort. For more information: http://ville.malartic.qc.ca/	Financial support provided by the Mine for work under the Action Plan for the strategic Development of the Town.	Mine involvement in committee work.
Spring 2016 *Postponed until Spring 2017.	<ul><li>Mine</li><li>EcoMalartic</li></ul>	Validate feasability.	Harmonize with the EcoMalartic Action Plan.
2017	Mine	Enhance the Volunteer involvement Program	Promote the program to local organizations and mine employees.

\*Canadian Malartic Mine \*\* Canadian Malartic Monitoring Committee \*\*\* Town of Malartic

### Table 10 : Project Coordination and

#### Associated **PROJECTS Related Themes** Deliverables Timefram Solutions Study on the impact of vibration in the Town of Malartic Vibration and structural Integrity Spring 2016 2.1 Real estate values and resale potential Vibration and Structural Integrity 19 Community relations mechanism Community Office Winter 2016 Coffee Meetings Quarterly newsletter Information documents "Did you know?" columns in local newspapers Enhanced Communications

## Tab.10 (Cont'd)

	Collaborators	
5	<ul><li>Mine</li><li>CMMC</li></ul>	<ul> <li>Collaborative age the Mine and the Mine and the Monitoring Comfollow up the st step of the data</li> <li>Mandate given the Began study wo</li> <li>Conduct the stute</li> <li>Inform resident</li> </ul>
6	Mine	<ul> <li>Community Relatin downtown M 2016.</li> <li>CMM Newslette - December 201 - March 2016</li> <li>Navember 2016</li> </ul>
		<ul> <li>Coffee Meetings - January 2016</li> <li>May 2016</li> <li>Several informat made available Relations Office</li> <li>Information do Good Neighboi</li> <li>Studies</li> <li>Maps of measu the Town of M.</li> <li>Interactive air management r</li> <li>"Did You Know? newspaper.</li> <li>Information eve interested in CM.</li> <li>Workshop on t Environmental i the Malartic Ext</li> <li>Informative vid various topics r activities:</li> <li>Environmental</li> <li>Community re</li> <li>Malartic Exten</li> <li>Noise in Malar</li> <li>2016 Report Ca</li> <li>Door-to-door di and information activities to reci</li> </ul>

![](_page_32_Picture_3.jpeg)

#### Table 10 : Project Coordination and Monitoring Table

'k Done	Next Steps
greement between ne Canadian Malartic nmittee established to tudy and validate each a analysis process. to ProtTekRoc. ork. udy. t of study results.	<ul> <li>Further deepen the analysis to confirm if results are representative of all damage reported by citizens.</li> <li>A public meeting to beorganized jointly by the CMMC and CMM, will be held to answer citizen's questions about the study.</li> </ul>
lations Office opened lalartic in January ers published: 15 16	<ul> <li>Next newsletter to be released in the winter of 2017</li> <li>Develop complementary information tools.</li> <li>Maintain information channels.</li> </ul>
ation documents at the Community e: ocuments on the our Guide uring instruments in / lalartic quality and noise map (real time) ?" columns in the local ents held for parties MM operations: the highlights of the impact Assessment of tension Project leo capsules on related to CMM I performance elations usion Project rtic ard istribution of letters n memos on CMM idents of Malartic.	

## Tab.10 (Cont'd)

PROJECTS	Associated Solutions	Related Themes	Deliverables	Timeframe	Collaborators	Work Done	Next Steps
Engineering Projects	8, 16, 17	<ul> <li>Vibration</li> <li>Noise</li> <li>Dust</li> <li>Traffic and road safety</li> </ul>	Continuous improvement	Winter 2017	Mine	<ul> <li>The proposed solutions were anlayzed by the Mine's Engineering Committee. Below are the Committee's findings:</li> <li>Extending blasting duration is not a workable solution because of the mine's operating decree (regulatory framework). As well, complaint history shows that longer blasting is more disruptive to the population.</li> <li>Rail transport has several drawbacks, such as the noise generated at the transhipment site in town.</li> <li>The Engineering Team will examine the transportation of ore by conveyor in the pit in greater detail during the year. There is a budget for analyzing the pros and cons in terms of profitability and overall performance improvement.</li> </ul>	Engineering Team to conduct a detailed analysis of conveyance.
<b>Potential toxicological</b> health risk assessment following release of fugitive dust from CMM	4	<ul> <li>Dust</li> <li>Physical and psychosocial health</li> </ul>		Available for cor http According to the	Study completed nsultation at the Communit ://communaute.canadianm study's finding, the mine's to the populatio	and released. y Relations Office or the CMM website : alartic.com/fr/documents/. activities pose no significant health risk n of Malartic	
Traffic and Road Safety	8, 9, 11	Traffic and road safety	<ul> <li>Make intersection between du Lac Mourier Road and mine site entrance safer</li> <li>Information to come</li> </ul>	Fall 2016	Mine	<ul> <li>Create a committee on traffic safety at the mine site entrance.</li> <li>Install a camera at the junction of du Lac Mourier Road and the mine site entrance.</li> <li>Increase employees' and contractors' awareness during employee and contractor onboarding.</li> <li>Since traffic and road safety are the Town's responsability, authorities were approached. Concerned citizens were invited to inform Town representatives of their worries. At that point, they'll examine the creation of a committee to address this issue and convene the partners involved.</li> </ul>	<ul> <li>Continue to increase employees' and contractors' awareness.</li> <li>Collaborate with various committees at the request of the Town.</li> </ul>

![](_page_33_Picture_2.jpeg)

#### Table 10 : Project Coordination and **Monitoring Table**

#### **RESULTS OF PHASE 3 OF THE COLLABORATIVE APPROACH**

Our team and the community were driven by a sincere will to implement major projects. We took action, mobilized our team, brought various parties together to work on joint projects and thus made substantial progress. We believe that all actions count and that collaboration makes the greatest achievements possible.

#### WORKING GROUP ON COEXISTENCE ISSUES IN MALARTIC

A working group consisting in representatives of the Town of Malartic, the Canadian Malartic Monitoring Committee (CMMC), CMM and the Comité de citoyens de la zone sud de la voie ferrée de Malartic (CCZSVFM) was created to work on coexistence issues in Malartic. Representatives of the CCZSVFM withdrew as soon as the Working Group began its work. Given the community's high expectations, though, the nine representatives of the three remaining parties decided to continue their work and develop the framework document Good Neighbour Guide on Impact Mitigation and Compensation and Property Acquisition in Malartic.

Working Group members joined forces to seek a consensus on a preliminary Guide. Throughout its work, the Working Group had great latitude and was supported by recognized independent experts while it identified the strict, legitimate measures to meet as many expectations of the citizens of Malartic as possible.

An external firm was mandated to oversee the Working Group's activities and to ensure constructive and respectful operation and a smooth process. The Working Group held more than 20 meetings in order to develop the Guide's final version that was released on September 1, 2016.

#### **GOOD NEIGHBOUR GUIDE**

The Good Neighbour Guide, first released in May 2016, contains an Action Plan to Prevent, Manage and Mitigate Impacts, a Program to Compensate for Impacts and Inconveniences associated with the mine's activities and Guidelines Governing the Acquisition of Principal Residences in Malartic.

- impact and continuously improve;
- financial compensation;
- in Malartic:
- desire, in their search for a new residence; and
- their lease.

The Working Group held various public consultations in order to enhance the Guide's preliminary versions and meet as many expectations and wishes as possible. The high consultation participation rate and residents' strong buy-in of the Guide's various programs since its implementation on September 1, 2016, are proof positive that the solutions put forward address the stated needs.

![](_page_34_Picture_14.jpeg)

The Action Plan identifies the measures taken by CMM to reduce its socio-environmental

The Program to Compensate for Impacts and Inconveniences associated with CMM's activities aims to provide eligible owners and tenants residing in Malartic with retroactive and

For residents in the southern neighbourhood (nearest the operations) who are no longer able to live next to the mine, the Guidelines Governing the Acquisition of Principal Residences

+ Guarantee the sale of their property at market value while supporting them, if they so

 $\rightarrow$  Make it easier for tenants to move out of the neighbourhood at the end of

![](_page_35_Picture_0.jpeg)

 Table 11 : Good Neighbour Guide Improvements

Date	Events Relating to the Good Neighbour Guide	Highlights
April 2016	Stakeholders and experts were consulted with a view to improving and validating the content of the Guide's preliminary version.	<ul> <li>Five interest groups submitted their comments on the preliminary version.</li> <li>Four experts recognized in different fields also submitted their comments on improving the Good Neighbour Guide.</li> </ul>
May 2016	<ul> <li>Two information and consultation sessions were held with the residents of Malartic on the Good Neighbour Guide's preliminary version.</li> <li>Fifteen-day period to submit feedback and suggestions on the Guide's proposed second version.</li> </ul>	<ul> <li>More than 300 participants.</li> <li>61% of participants were satisfied with the event.</li> <li>159 comments received.</li> <li>More than 1,200 people were met.</li> </ul>
<b>June 2016</b>	The Good Neighbour Guide's preliminary version was tabled during hearings held by the Bureau d'audiences publiques sur l'environnement (BAPE).	
August 2016	Open houses were held for two weeks at CMM's Community Relations Office and at the offices of the Monitoring Committee and the Town of Malartic to discuss the proposed third version of the Good Neighbour Guide.	Almost 1,500 residents were met.
September 2016	Good Neighbour Guide was implemented.	
November 2016	End of the period to claim retroactive compensation (2013-2016).	<ul> <li>94% uptake rate of the Retroactive Compensation Program (at November 30, 2016)</li> </ul>

The implementation version of the Good Neighbour Guide (at September 1) is available on our website: http://communaute.canadianmalartic.com/fr/co-construction-documents/

(at November 30, 2016)

3,082 Malartic residents<sup>1</sup> registered

#### or **94%**<sup>2</sup> of the population

This period was ultimately extended until March 31, 2017. In total, 96% of the population registered with the compensation program set forth in the Good Neighbour Guide.

> **GUIDELINES GOVERNING ACQUISITION** (at December 31, 2016)

![](_page_35_Picture_11.jpeg)

ercentage obtained based on the total number of individual claims made by Malartic residents, or three thousand and eighty-two (3,082), ven that the population of Malartic is three thousand two hundred and ninety-four (3,294). burce: Ministère des Affaires municipales et Occupation du territoire website). cludes claims filed by residents and non-residents of Malartic.

## The Review in Numbers **COMPENSATION PROGRAM**

**3,592** people<sup>3</sup> in all registered

for the retroactive period

### \$6,374,930 in compensation was paid out at December 31, 2016

### properties acquired

The level of buy-in of the Good Neighbour Guide is the result of a vast participative approach centred on information, consultation, consensus-building, and input by citizens, interest groups and stakeholders in Malartic. This outcome is proof positive that by rallying a community around a common goal, it is entirely possible to complete large-scale projects that provide positive impacts for that community.

Current Malartic residents and former residents who lived in Malartic during the period covered were informed of the Good Neighbour Guide's implementation through several information tools and materials.

- B F
- Information letter sent out to residents
  - Brochure summarizing the Good Neighbour Guide
  - Factsheet on changes to enhance the Guide
  - Information sheet on the release
  - Sheet listing examples of compensation amounts based on residence zone and number of residents per residence

![](_page_36_Picture_8.jpeg)

TOOLS

- Local and regional newspapers
- General radio stations
- Door-to-door
- Group and face-to-face meetings
- Home meetings
- Website

The Good Neighbour Guide also provides for a Review Committee consisting of one member each from the Town of Malartic, the CMMC and CMM to conduct an anonymized analysis of special situations that could arise during the Guide's implementation. The Review Committee met three times in fall 2016 and will meet as required thereafter. The Review Committee releases a summary of special situations that have been resolved and incorporates it into the Good Neighbour Guide where necessary.

#### The documents are available at: communaute.canadianmalartic.com/fr/co-construction-documents/.

The Quebec Mineral Exploration Association recognized the innovative Good Neighbour Guide during its annual Recognition Gala by presenting Canadian Malartic Mine with the Award of Excellence for Sustainable Development.

#### WORKING GROUP ON HEATH AND AIR QUALITY

The October 2015 Collaborative Workshop's participants identified the establishment of a Working Group on Health and Air Quality as a priority. The Working Group's main mandate was to develop a study grid to learn more about the potential toxicological health risks following the release of fugitive dust from CMM.

Believing that residents' concerns can be more adequately addressed through dialogue and collaboration than through releasing several studies, CMM proposed that the Working Group on Health and Air Quality, which sought to include the Town of Malartic, CMM, the CMMC, the CCLSRS and the Public Health Branch (PHB), develop a study grid that would have everyone' full support. However, the parties involved turned down the collaborative proposal.

In June 2016, CMM released a human health toxicological risk assessment. The study, conducted by independent experts using operating data and prudent assumptions, showed that the mine's activities pose no significant health risk. CMM thought it was important to mandate experts who could incorporate real operating data in order to address the population's concerns regarding the potential risk of their exposure to dust.

![](_page_36_Picture_22.jpeg)

#### JOINT ANALYSIS OF THE EFFECTS OF VIBRATIONS ON CONTROL HOMES

CMM established a Control Home Program in 2014. The Program's objective was to gather data to analyze how vibrations affect buildings in Malartic by examining various aspects such as structural type of dwelling and soil type. Four residences were selected as control homes and were fitted with various measuring instruments. In winter 2016, the CMMC and CMM launched a joint study to analyze two years worth of data.

The CMMC and CMM jointly mandated ProTekRoc/TBT, internationally recognized experts in explosive engineering and geotechnics, to conduct the analysis.

Based on an analysis of the data on the four control homes, the experts concluded that: "Crack monitoring activities failed to provide evidence of significant blast-induced displacement of an existing crack in a structural member that resulted in permanent offset". In other words, CMM's blasting vibration had no impact on the control homes and did not generate any structural damage.

#### **COMMUNITY RELATIONS OFFICE OPENED**

In January 2016, CMM officially opened its Community Relations Office at 650 Royale Street in Malartic as part of its communication efforts to facilitate residents' access to Company representatives and information on projects and mining activities. The Community Relations Office quickly became THE place for discussion, having welcomed almost 6,500 visitors since it opened.

Visits averaged about 600 per month and peaked in September (2,513) and October (1,652), coinciding with the Good Neighbour Guide's implementation. Citizens visited the office for two main reasons: to inform themselves or share a concern.

TOTAL NUMBER OF PEOPLE PER MONTH

MONTHLY AVERAGE, 2016

585

August enternoet octobet November Decemper

#### **COMMUNITY COFFEE MEETINGS**

Two "Coffee Meetings" – one on community relations and the other on the Malartic Extension Project – were held on January 19 and May 10, 2016, respectively. Their purpose was to give residents an opportunity to ask questions and discuss specific issues with mine employees. In total, almost thirty participants (residents and organizations) attended the meetings.

#### **QUARTERLY INFORMATION BULLETIN**

Acting on one of the solutions put forward in Phase 2, and in order to strengthen communication with the community, CMM launched a newsletter that is sent out to all citizens of Malartic and Rivière-Héva. The information bulletin provides information on activities, community involvement, environmental performance, the Collaborative Approach and upcoming events. Four newsletters have been issued to date: December 2015, March 2016, November 2016 and March 2017.

![](_page_37_Picture_11.jpeg)

![](_page_37_Picture_12.jpeg)

**Figure 8 :** Traffic at the Community Relations Office

#### **COLLABORATION WITH ECOMALARTIC**

The Horizon 2030 project, developed by the Town of Malartic and now known as EcoMalartic, is currently establishing various thematic committees. CMM, in a desire to become involved, has formally committed to financially supporting work on the town's strategic development action plan, undertaking to contribute \$1.5 M to the EcoMalartic Development Fund over the next five years.

#### **UPCOMING COLLABORATIVE APPROACH ACTIVITIES**

- Various local players and interest groups will be called to a meeting in order to establish a concerted approach to developing an integrated revitalization action plan for Malartic.
- → An account of the previous phases will be provided during Phase 4 of the Collaborative Approach.

#### MAKING INFORMATION AVAILABLE

#### **Malartic Extension Project**

Prior to the May 10 Coffee Meeting on the Malartic Extension Project, Canadian Malartic Mine released, on March 31, 2016, the Malartic Extension Project Environmental Impact Assessment as part of CMM's commitment to the population to release the Environmental Impact Assessment as soon as possible. Although the regulatory process did not require CMM to release the assessment at this stage of its project's analysis by government authorities, CMM released the following documents because it wanted to keep citizens and project stakeholders informed:

- + annotated version. This is the complete assessment, as filed with the MDDELCC and enhanced following additional requests for information received from various ministries, as part of the environmental assessment's admissibility analysis;
- → a summary of the Assessment by WSP; and
- → assessment Summary publicly released version.

When it released the Environmental Impact Assessment, CMM utilized a variety of means and venues to make the documents accessible. All documents were posted on the community website, where they are still available. A computer station was set up at CMM's Community Relations Office and at the Canadian Malartic Monitoring Committee's (CMMC) Office so that people could consult the Environmental Impact Assessment and summaries. DVDs were also available at both locations and at Malartic's Town Hall.

In keeping with transparency and information accessibility, a workshop presenting the highlights of the Environmental Impact Assessment was held on May 7, 2016. Some fifty people took part in the event, which promoted direct exchanges between residents, the mine's experts and consultants through presentations whose themes were also featured at information stands.

#### **TOPICS COVERED**

- Extension of the Canadian Malartic pit
- Deviation of Highway 117
- → Noise
- $\rightarrow$  Air quality
- → Water
- Vibration
- Social environment

#### VIDEO CLIPS

Five video clips were posted on our website and social media in 2016. These informative and educational videos presented facts and insights on our activities, adding another dimension to our communications and further spreading our various messages.

The five videos focused on these main topics:

- Canadian Malartic Mine:
- → Malartic Extension Project;
- Community relations mechanisms;
- Environmental performance; and

![](_page_38_Picture_29.jpeg)

+ How does noise in Malartic compare to noise in other municipalities?

![](_page_39_Picture_0.jpeg)

CMM takes its role as a responsible corporate citizen very seriously. For that reason, we always work in cooperation with different organizations to reach agreements of benefit to the community. Every year, CMM supports the mission of hundreds of local and regional organizations through donations and sponsorships in the fields of health and sports, education, arts and culture, and the environment. These organizations are chosen in accordance with strict guidelines that we use to evaluate requests in order to be as fair as possible and maximize benefits to the community.

In 2016, the community received more than \$720,000 in donations and sponsorships as well as support for regional research.

#### Major Agreement with CTRI and the Fondation du Cégep de l'Abitibi-Témiscamingue

Canadian Malartic Partnership was proud to formalize, on July 5, 2016, a major agreement with the Fondation du Cégep de l'Abitibi-Témiscamingue and the Centre technologique de résidus industriels (CTRI). Under this agreement, the Partnership has undertaken to contribute \$100,000 over five years to help the CTRI to continue its training and research mission, among other things, which are key factors for the future of communities.

#### Partnership with the Malartic Western Festival

During the summer, CMM agreed to be the official presenter of the Malartic Western Festival for its 2016 to 2018 editions. CMM views the Malartic Western Festival as an event that benefits the community. It generates positive spin-offs for the municipality, spotlights the town's must-see attractions and showcases its dynamic population. It's a large-scale event that attracts visitors from Quebec, Ontario and the United States, generating significant positive spin-offs for the local economy.

#### \$30,000 donated to Organisation Para-paroissiale

Canadian Malartic Mine was pleased to donate \$30,000 to Malartic's *Organisation Para-paroissiale* on October 3, 2016, for the renovation of the Saint-Martin-de-Tours Church basement in order to improve access to the basement and enhance its features.

#### Malartic Public Market

We were delighted to take part in the Malartic Pubic Market, a buy-local initiative, by investing in the Canadian Malartic Mine Pavilion that features a bread oven. The Malartic Public Market is a pre-eminent meeting place.

#### Multi-functional, All-season Bike Path

In September, the CMM team took part in an announcement that formalized the upcoming development of a multi-functional, all-season bike path in Malartic and Rivière-Héva. Malartic's All-Season Path Committee has been working hard on the bike path for several years, demonstrating that the residents of Malartic are dynamic and that Malartic is a bustling town. This project fits perfectly with our values, and promotes physical activity and healthy lifestyles.

![](_page_39_Picture_13.jpeg)

### Strength through Mobilization

#### **Volunteer Encouragement Program**

While pursuing its ongoing social involvement objective, CMM is maintaining its Volunteer Encouragement Program. Created in 2012, the Program aims to establish a connection between organizations looking for volunteers and Mine employees interested in getting involved in the community. We keep our employees up to date by sending them information on the various needs of local organizations. In this way, everyone can find an activity that matches their personal interests and objectives.

For CMM, volunteering means more than simply giving time; it is a matter of social development with a major impact on the community's well-being. We are proud to contribute to the success of a number of organizations through relationships born from this Program. In 2016, our team performed over 1,931 hours of volunteer work.

To encourage as many employees as possible to play an active part in the Program, we hold an annual Volunteer Recognition Cocktail Hour during which four \$1,000 awards are given out randomly to four employees who participated in the Program. Recipients donate the award to a Malartic organization of their choice.

In 2016, grants were awarded to the following organizations:

- Malartic Youth Shelter
- Malartic Food Bank
- Leucan
- Malartic Figure Skating Club

#### Partnership Between Canadian Malartic Mine and the Mineralogical Museum

For a sixth consecutive year, the Mineralogical Museum gave tours of Canadian Malartic Mine's facilities and enlightened visitors on the mining industry's technological development. The Museum welcomed more than 3,500 visitors in 2016. We are pleased that this partnership has generated significant benefits for the Museum's visibility and improved the local and regional tourism offering.

![](_page_40_Picture_12.jpeg)

![](_page_40_Picture_13.jpeg)

#### Fonds Essor Canadian Malartic

We believe that in order to be able to have a long-term positive influence on the community, we must invest in its economic and social development. That is precisely the mission of the *Fonds Essor Canadian Malartic* (FECM). CMM has supported the FECM by investing \$150,000 annually since 2008, with a further contribution coming from the sale of the mine's waste oil.

At the close of 2016, the FECM had donated \$168,520 to the community.

![](_page_40_Figure_17.jpeg)

Organizations that would like to receive financial support are invited to submit an application to the FECM's Board of Directors, which consists in two Canadian Malartic Mine Board members, four representatives of Malartic and a representative of the Town of Malartic. Projects must meet specific criteria: they must improve residents' quality of life, help residents reach their full potential, and encourage the growth of the Town of Malartic. Since its inception in 2008, the FECM has awarded more than \$1.8 M to almost 100 organizations. At December 31, 2016, it had \$3,076,950 in capital.

![](_page_40_Picture_19.jpeg)

![](_page_41_Picture_0.jpeg)

#### MONITORING COMMITTEE MAKE-UP

An eight-member board of directors administers the Committee: One resident from one of the five RCMs in Abitibi-Témiscamingue;

- $\rightarrow$  One academic representative;
- → Three Town of Malartic residents who live within 7 km of the mine site;
- $\rightarrow$  One mining industry representative;
- One regional environmental organization representative; and
- One Malartic business community representative.

The Committee also includes two government delegates, municipal delegates, Company delegates and two observers:

- One delegate from the ministère du Développement durable,
- → One delegate from the Direction de la santé publique;
- $\rightarrow$  One delegate from the Town of Malartic;
- One delegate from the Municipality of Rivière-Héva;
- Two delegates from Canadian Malartic Mine; and
- de Malartic.

#### **CANADIAN MALARTIC MONITORING COMMITTEE**

The mission of the Canadian Malartic Monitoring Committee (CMMC), an independent body, is to put questions or issues forward that could adversely affect citizens' quality of life in order to promote solutions that enhance harmonious coexistence between CMM and the communities of Malartic and Rivière-Héva, while building a sustainable community.

Since the Monitoring Committee was established in 2009, CMM has been strongly committed to its smooth operation and recognizes that the Monitoring Committee plays an important role in the community. In 2016, CMM provided the Monitoring Committee with \$160,990 in operational funding, in addition to \$41,128 for an analysis of the Malartic Extension Project's environmental impact assessment and, where necessary, for external expertise to clarify concerns and lead the Committee's discussions.

#### CMM:

- > Supports the Monitoring Committee's work, especially when it comes to documenting certain aspects or providing information;
- + Answers the Monitoring Committee's questions within a reasonable timeframe;
- $\rightarrow$  Provides documents that it releases:
- Takes part in the Monitoring Committee's monthly meetings when asked; and
- Works on joint projects (vibration study, Good Neighbour Guide).

![](_page_41_Picture_26.jpeg)

de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC);

→ One delegate from the ministère de l'Énergie et des Ressources Naturelles (MERN);

> Two guest observers from the Comité de citoyens de la zone sud de la voie ferrée

#### **RELATIONS WITH FIRST NATIONS**

Canadian Malartic Mine endeavours to collaborate with all of its stakeholders, including groups and individuals that have an interest in the land we mine. For that reason, we consider it important to hold open discussions with local members of First Nations in order to gain a clear understanding of our mutual interests and develop lasting relationships.

Our goal is to actively participate in developing collaborative agreements and to support growth projects for communities. For that purpose, we awarded funds in 2016 to allow the *Centre régional d'éducation des adultes Kitci-Amik* (CRÉA) of Lac Simon to become owner of the Amikoc day care centre. This purchase by the CRÉA allowed several parents in the community to advance their education or return to school in supportive circumstances. This is one example of a growth project that allows the community to take full charge of its development.

We also held meetings in 2016 to strengthen our ties with members of three communities that expressed interest in our Company: the communities of Pikogan, Winneway and Lac Simon. A negociation table was set up in 2015 to reach a cooperation agreement on growth projects, workforce development and entrepreneurship. Three meetings were held in 2016.

We intend to pursue these relationship-building efforts.

![](_page_42_Picture_5.jpeg)

## ENVIRONMENTAL PERFORMANCE

## **ENVIRONMENTAL PERFORMANCE** Innovation and Standards at Work

The improvements in our environmental performance in recent years attest to the determination, high standards and effectiveness of the entire CMM team. We have worked continuously to improve our procedures and equipment and reduce the potential impact of the Mine's activities. To this end, we have adopted innovative practices together with meticulous follow-up. Our team's objective is the same: to comply with established standards at all times while constantly improving our performance.

#### **Regulatory Compliance**

We realize that responsible activities are essential to our success and serve as statements of intent for the management and limitation of environmental impacts. The 2016 environmental report on CMM activities is presented on the following page. The CMM team is especially proud of its 2016 performance report.

#### A video of 2016 highlights is available: https://youtu.be/lmA0h52-BOU.

CMM did not receive any administrative monetary sanction or notice of violation in 2016.

![](_page_43_Picture_6.jpeg)

### 2016 Environmental Report

![](_page_43_Picture_8.jpeg)

### 100% of Mine activities complied with the municipal noise bylaws in force in Malartic.

Although Malartic's municipal noise bylaws are similar to those in many Quebec municipalities known for their quality of life, and despite differing interpretations by CMM and by the ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) concerning the Ministry's standard applicable in 2016, Mine operations were 95.8% compliant with the MDDELCC's interpretation in 2016.

![](_page_43_Picture_11.jpeg)

**100%** of Mine activities complied with Quebec standards governing air quality and dust generation. In 2016, noise generated by the Mine varied from 43 to 46 dBA at the various sound measuring stations, or 2 to 5 dBA less than the nightly annual average of 48 dBA of the town's noise (residual or "ambient" noise).

![](_page_43_Picture_14.jpeg)

**99.2%** of blasting activities complied with existing Quebec standards.

> More specifically, in terms of suppression, vibration and NOx emissions, our 2016 figures were, respectively, 100%, 99.6% and 99.6%. Corrective action was taken to improve performance, as shown by the annual performance report.

#### **MATERIALS CONSUMED**

Given the nature of our activities, most of the materials that the Company consumed were for the ore processing plant. CMM used the materials listed below during operations in 2016.

![](_page_44_Picture_2.jpeg)

 
 Table 12 :
 Materials Consumed in 2016

MATERIALS	QUANTITY CONSUMED
Ore Processing Plant	
Nitric Acid (67%) (kg/MT)	N/A
Fresh Activated Charcoal (kg/MT)	0.037
Scale Inhibitor (kg/MT)	0.009
Sulphur Dioxide (kg/MT)	0.054
Flocculent (kg/MT)	0.029
Balls for Tertiary Grinder (kg/MT)	0.223
Balls for Secondary Grinders (kg/MT)	0.377
SAG Balls (kg/MT)	0.494
Quick Lime (kg/MT)	0.525
Sodium Cyanide (100% NaCN) (kg/MT)	0.198
Liquid Oxygen (kg/MT)	0.204
Hydrogen Peroxide (100% H <sub>2</sub> O <sub>2</sub> ) (kg/MT)	0.116
Caustic Soda (100% NaOH) (kg/MT)	0.026
Cupric Sulphate (hydrated) (kg/MT)	0.004
Sodium Metabisulphite (kg/MT)	N/A
Zinc Sulphate (hydrated) (kg/MT)	0.004
Sulphuric Acid (100% H <sub>2</sub> SO <sub>4</sub> ) (kg/MT)	0.409
Effluent Treatment Plant	
Hydrogen Peroxide (100% H <sub>2</sub> O <sub>2</sub> ) (kg/MT)	0.040
Caustic Soda (100% NaOH) (kg/MT)	N/A
Sulphuric Acid (100% H <sub>2</sub> SO <sub>4</sub> ) (kg/MT)	N/A
Ferric Sulphate (hydrated) (kg/MT)	0.024
Cupric Sulphate (hydrated) (kg/MT)	N/A
Zinc Sulphate (hydrated) (kg/MT)	N/A
Sodium Bisulphite (100% NAHSO <sub>3</sub> ) (kg/MT)	N/A
Flocculent (kg/MT)	0.002
Metal Precipitator (kg/MT)	0.064
Operations	
Explosives (t)	18,704
Diesel (litres)	49,683,838
Electricity (MWh)	650,669,726
Tires (units)	1,140

#### **SPILL MANAGEMENT**

Each spill is recorded and examined. We ensure that causes are identified and action is taken to reduce risks and prevent spill recurrence.

Spills recorded in 2016 did not have any major impact or cause environmental contamination outside the footprint of the CMM facilities. No spills reached any waterways. All were recovered.

The increased number of cubic meters reported in 2016 compared to 2015 results in particular from a spill of process water in the plant after a new piece of equipment (thickener) was started. The spill was quickly contained at the outer limit of the plant.

![](_page_44_Figure_9.jpeg)

![](_page_44_Picture_10.jpeg)

ANTIFREEZE

![](_page_44_Picture_12.jpeg)

#### Figure 10 : Spill (per product spilled)

#### **NOISE MANAGEMENT**

Actions that allowed us to achieve our results include the gradual and complete shutdown of equipment when the ambient noise limit is approached. Equipment was shut down for nearly 30,000 hours in 2016. To reach our performance objectives, we optimized our activities by maximizing operations at the appropriate time.

The Town of Malartic has three sound stations that notify the CMM team of noise levels in real time. Noise samples are taken at each station 24/7. When the noise level increases, action is taken automatically.

Our team applies 12 or so mitigation measures.

 Table 13:

 Existing Noise Management Mitigation Measures

MITIGATION MEASURES	DESCRIPTION
Top up the Backfill Berm Near the Crushers	The goal was to create a higher enclosure around the crushers in order to contain the noise.
"Noise / Dust Committee"	The Committee's mandate is to reduce the level of noise that may be produced by operations. It includes several employees working in different fields.
Dynamic Acoustic Map	This map makes it possible to identify equipment that must be shut down because of the level of noise it produces, as sensed at each acoustic station.
Drill Shock Absorber	Make a drill shock absorber to reduce drill noise. The shock absorber is located between the hammer and the drill rod.
Green Wall	The Green Wall mitigates noise and dust. It is 15 metres high and 1.3 km long. The current wall was completed in 2011 and there are plans to extend it during the mine Malartic Extension Project.

MITIGATION MEASURES	
Soundproof Wall on Main Ramp	<ul> <li>A soundproof wall made of con</li> <li>The wall reduces truck engine</li> </ul>
Soundproof Wall at the Main Crusher	<ul> <li>Soundproof wall made of cont</li> <li>It reduces the noise generated</li> </ul>
<i>Quiet Packs</i> On Trucks	<ul> <li>Additional equipment, called equipped with quiet packs (muf</li> <li>This reduces truck noise by 3 t</li> </ul>
Rubber Lining Added to Dump Bodies	<ul> <li>→ Rubber lining has been added lining, reduces the noise gene</li> <li>→ Noise caused by the first buck</li> </ul>
Louvers Added to Power Shovels	<ul> <li>Louvers have been installed or</li> <li>This attenuates radiator nois causing it to reverberate betw</li> <li>By lengthening the path of noi</li> </ul>
Critical Silencers Installed on Power Shovels	<ul> <li>→ A special silencer, called a cr power shovels (CAT 6050).</li> <li>→ Noise is attenuated before it i</li> <li>→ Critical silencers reduce noise</li> </ul>
Acoustic Panels Installed on LeTourneau Loaders	<ul> <li>Acoustic panels and a high-per</li> <li>This reduces engine compartm</li> <li>The muffler and acoustic pane</li> </ul>
Slow Down Operations when Winds Blow from the South	<ul> <li>Vehicles must slow down when</li> <li>This applies to the entire fleet</li> <li>Ramps and secondary roads after sound propagation conditioned</li> <li>One of the two access ramps in</li> </ul>

#### DESCRIPTION

ontainers was erected on the main ramp. e noise by 6 decibels when trucks travel up the ramp.

ntainers was erected at the Main Crusher's east door. In by the unloading of production trucks by 6 decibels.

Quiet Packs, was purchased to modify mining trucks. Trucks are fflers and special engine components) to reduce the noise they emit. to 4 decibels.

ed to all dump bodies. The lining, which covers the original steel erated by rock that falls into the dump body. ket load that falls into the truck is reduced by 6 decibels.

on the radiators of power shovels. ise when power shovels are in operation. Louvers divert sound, ween the vanes.

bise, noise is attenuated before it exits the louvers.

ritical silencer, has been installed on the exhaust pipe of diesel

is released into the atmosphere. e by 5 decibels.

erformance muffler have been installed on LeTourneau loaders. ment noise.

els reduce the noise emitted by 6 decibels.

en winds blow from the south, southeast or southwest.

t of vehicles on the mine site.

(reserved for the fleet of standard vehicles) may be used only litions have been analyzed.

is closed when necessary.

In December, CMM broadcast a video that took an educational look at the concept of noise in the Town of Malartic. The video explained the ambient noise recorded, contrasting it with two other Quebec municipalities with comparable bylaws, namely, Val-d'Or and Blainville. The results of the activity, conducted over three consecutive nights, were comparable even when the Mine was in operation.

![](_page_46_Picture_1.jpeg)

### Table 14 : Sound Levels Obtained during an Exercise held inNovember 2016 (in decibels)

Between 4 a.m. and 5 a.m	VAL-D'OR	MALARTIC	BLAINVILLE
November 9, 2016	44	41	44
November 10, 2016	47	47	45
November 11, 2016	48	50	50
AVERAGE	47	47	47

![](_page_46_Picture_4.jpeg)

#### **AIR QUALITY MANAGEMENT**

Air quality is also managed through the gradual and complete shutdown of equipment on nearing the air quality limit.

Work to install a third air quality monitoring station was begun in late 2015, in response to concerns raised by citizens in the Town of Malartic's eastern neighbourhood. Installation of this third station was finalized in 2016. The station is officially in operation.

These stations inform the CMM team in real time about dust levels and allow it to take prompt action when dust levels rise.

Our team also developed and implemented a new forecasting tool over the past year. The tool is used to plan dust-related shutdowns based on weather forecasts.

In addition to these mitigation measures, several other at-source reduction, processing, control and monitoring methods are also used. The measures applied and in place are detailed on the following page.

![](_page_46_Picture_11.jpeg)

## **Tab.15**

### Table 15: Existing Air Quality Management Mitigation Measures

Continuous Watering	<ul> <li>During the summer, water cannons continually water surfaces before vehicles are loaded.</li> <li>Water cannons water a surface continually during work.</li> </ul>
Spray Roads and Ore with Water	<ul> <li>Rocks are sprayed with water before they are loaded into trucks in order to limit dust.</li> <li>Spraying is done in the winter, too. Water trucks spray loading areas.</li> </ul>
Filling Stations in the Pit for Water Trucks	<ul> <li>Water truck filling stations (goosenecks) have been installed at the pit in order to move them closer to operations.</li> <li>Filling stations located at the pit shorten the time between waterings.</li> <li>Other filling stations are located outside the pit.</li> </ul>
"Dust / Noise Committee"	<ul> <li>The Committee is responsible for implementing and evaluating the solutions presented.</li> <li>The Committee includes several employees working in different fields at Canadian Malartic Mine.</li> </ul>
Atmospheric Dispersion Modelling Tool	The software defines dust direction, depending on the location of stationary equipment like drills in the pit. The data can then be used to prioritize actions based on wind conditions.
Optimize Water Cannons on Watering Trucks	<ul> <li>→ The water cannon stream range was increased.</li> <li>→ The hydraulic motor was changed in order to improve water flow.</li> <li>→ New nozzles were installed.</li> </ul>
Green Wall	The Green Wall mitigates noise and dust. It is 15 metres high and 1.3 km long. The current wall was completed in 2011 and there are plans to extend it during the mine Malartic Extension Project.
Rubber Skirting on Drills	<ul> <li>Drills have been equipped with rubber skirting to limit dust dispersion during drilling.</li> <li>Skirting consists in a rubber curtain affixed underneath the drills.</li> </ul>
Water Tanks on Drills	<ul> <li>Production drills at Canadian Malartic Mine are equipped with water tanks.</li> <li>Water flows through the drill rod and bit before being injected into the borehole. Water limits the amount of drilling dust.</li> <li>Contractors working on the CMM site are also required to have drills equipped with water tanks or a dust extractor (source sensor).</li> </ul>
Boom Sprayers Mounted on Tank Trucks	<ul> <li>Boom sprayers have been mounted on tank trucks.</li> <li>Tank truck operators can now water fixed locations when necessary.</li> </ul>
Covers for Conveyor Components	<ul> <li>Temporary canvas covers have been installed over several conveyor components.</li> <li>These covers reduce dust emissions when ore is transported from the crusher to the dome.</li> </ul>
Spray Calcium Chloride on Secondary Roads	<ul> <li>Spray calcium chloride (calcium similar to that applied to roads in the winter). This is done on the secondary roads reserved for the fleet of standard vehicles.</li> <li>Calcium chloride reacts with the moisture in the air, keeping a thin layer of liquid on the roadway, which in turn keeps dust on the ground.</li> </ul>

#### **CMM did not register any exceedance in 2016.** Total particulate measurements were **five times lower than the existing standard.**

#### **BLAST MANAGEMENT**

CMM is authorized to perform two blasting activities per day: one between 11 a.m. and noon and the other between 3 p.m. and 4 p.m. The permitted length of the blasting is 15 seconds. Sometimes, scheduled blasting activities are cancelled because of the wind direction (blowing toward the Town of Malartic), among other reasons. In 2016, 255 blasts took place, for an average of 0.70 blasts per day. In all, no blasting took place on 140 days, one blast took place on 197 days and two blasts took place on 29 days.

Vibrations were measured using seven seismographs placed at locations in the town.

The table on the following page lists the mitigation measures implemented to strictly manage blasting activities.

![](_page_47_Picture_8.jpeg)

![](_page_48_Picture_0.jpeg)

#### Table 16: Existing Blast Management Mitigation Measures

Blasting Application Posted on the Mine's Website	A blasting application has been posted on CMM's website in order to keep citizens informed of upcoming blasts, cancellations and results. The goal is to provide citizens will quick and easy access to real-time information.
Quality Assurance Procedures	The goal of the clear and precise protocols is to ensure operational consistency and thus limit the potential for human error.
Decking	Decking reduces vibration intensity and the number of blasts required.
Electronic Detonators	<ul> <li>Electronic detonators allow for better control of blast sequence synchronization and effectiveness of explosives, while limiting vibration generation.</li> <li>One goal is to optimize blasting quality through better detonation control.</li> </ul>
Call Citizens Before Blasting	<ul> <li>A call program has been implemented to give citizens a two-minute warning of blasts. When a complaint is followed up, the resident concerned is given the option of signing up for the call program.</li> <li>The goal of this approach is to limit the effects of the startle response.</li> </ul>
Call the Presbytery	<ul> <li>The Community Relations Team calls the Presbytery twice a week to ensure that religious ceremonies are not disrupted by potential blasting vibration.</li> <li>CMM obtains the ceremony schedule and delays planned blasts when there are church ceremonies.</li> </ul>
Blast Modelling	<ul> <li><i>I-Blast</i> software enables engineers to anticipate blast results based on external influence factors, such as the type of rock and location.</li> <li>With modelling, blasting technical parameters can be modified and blasting can even be delayed if the likelihood that standards will be exceeded is too great.</li> </ul>
Notice Board Announcing Upcoming Blasts	<ul> <li>Two notice boards have been installed at either end of the town limits to inform people of the blasting schedules.</li> <li>The goal is to inform residents and people passing through Malartic of blasts with a view to reducing the startle response.</li> </ul>

#### WATER MANAGEMENT

We take a responsible, sustainable approach to managing various types of water. We see water as a vital resource and we are determined to operate in a manner that limits our water consumption.

Water pumped from former underground shafts

- operation.
- processing procedure.
- depending on its quality.

Run-off from the site and water from the Southeast Basin

- directed to the polishing basin when quantities allow.
- procedure.

Johnson Basin

- → A reserve in case of fire.
- water sources.
- → Sourced from the Raymond Creek.

**Potable Water** 

- → Sourced from the municipal water system.
- Solely used for human consumption.

→ Pumping occurs from a well in old underground mines previously in

→ A portion of the water is used by the ore processing plant for the ore

Additional water is pumped to the polishing basin or the Southeast Basin,

→ Water from the tailings pond is sent to the Southeast Basin.

→ The collected water is then pumped to the ore processing plant for reuse or

In 2016, 90.1% of the water used in the ore processing plant was recirculated from the Southeast Basin. The 4.9% reduction compared to 2015 figures was partly the result of a decrease in the total amount of water used by the

→ Back-up source of water should there be a supply issue with the other

→ Domestic wastewater is discharged into the municipal sewage system.

#### Table 17: Water Withdrawals (m<sup>3</sup>)

The following table shows the amount of water withdrawn from each source for Canadian Malartic Mine operations. These amounts are calculated using flowmeters.

SOURCE	2012	2013	2014	2015	2016
Southeast Basin (a)	6,666,317	10,313,000	12,473,537	12,302,620	12,105,308
Tailings Pond	3,333,158	978,483	(b)	(b)	(b)
Pit Dewatering (ground water) <sup>(c)</sup>	5,726,495	5,512,087	5,890,700	6,088,486	5,794,634
Johnson Basin	30,460	66,880	78,144	124,724	68,347
Municipal Water	25,853	27,414	48,698	23,057	30,836
TOTAL	15,782,283	16,897,864	18,491,079	18,538,887	17,999,125

(a) Water withdrawn from this basin is used by the ore processing plant.

(b) Water flows by gravity into the Southeast Basin.

(c) A portion of the water is used for spraying as part of dust control.

#### WATER RETURNED TO THE ENVIRONMENT

Effluent from the site enters the environment at Raymond Creek. The total volume of water discharged in 2016 amounted to 4,342,190 m<sup>3</sup>. The Parshall Canal is used to measure the flow of effluent.

The quality of water discharged into the environment in 2016 consistently met environmental standards.

# **Fig.11**

**Figure 11 :** Canadian Malartic Mine Effluent

![](_page_49_Figure_12.jpeg)

#### **PROJECTS COMPLETED IN 2016**

Our team carried out a numerous tailings pond-related projects over the year, as detailed in the table below.

PROJECTS	
Start up a new pumping station to the west of the site	This new pumping stat and natural water fron designed to pump 1,000
lmprove Thickener's Retrofit	It was determined in 20 about 68% as originally tailings thickener. A cer obtained in the fall of 2015, and work was fina
Additional Tailings Pond Monitoring Instruments	Several monitoring in 2016 to, along with oth behaviour. Our team e these instruments so t instead of downloaded communicated in real t
Build a New Polishing Basin	Construction of a new p is released into the en operation since May 20 released water.
Final Effluent Optimization	Optimization of new fin has officially been in op
Tailings Pond Spillways	Two new spillways wer into account the amour

![](_page_49_Picture_16.jpeg)

#### Table 18: Projects Completed in 2016

#### DESCRIPTION

ation, commissioned in March 2016, deviates clean m the site before it mixes with contact water. It is 00 m<sup>3</sup>/hour.

014 that the best way to bring tailings solids up to / designed, was to significantly modify the existing rtificate of authorization to carry out the work was 2015. Thickener modifications were begun in late alized in the spring of 2016.

nstruments were added to the tailings pond in her instruments, measure the pond's geotechnical eventually wants to automate data collection from the data can be automatically added to a database ed. In addition, tailings pond changes would be time.

polishing basin, which is the last basin before water polishing basin, which is the last basin before water policy of the basin has been in 016. A  $CO_2$  injection system controls the pH of the

nal effluent was completed in 2016. The optimizer peration since May 2016.

e built as a preventative measure. Their size takes nt of water generated by exceptional downpours.

#### TAILINGS, WASTE ROCK AND OVERBURDEN MANAGEMENT

The total amounts of overburden and waste rock mined in 2016, as well as the total amount of tailings created, are provided in the table below.

Table 19 : Total Amounts ofOverburden, Waste Rock and Tailingsin 2016

TYPE OF MATERIAL	VOLUME IN TONNES
Overburden Mined	0
Waste Rock Mined (total)	42,197,700
Waste Rock Reused in Tailings Dam Construction	4,299,518
Waste Rock Reused in Other Construction	0
Waste Rock Placed on Surface Waste Rock Piles	37,898,182
Thick Tailings Placed in Surface Tailings Containment	19,390,544

Through our recycling program, we sent 3,544 tonnes of waste to recycling centres. This amounted to 90.5% of CMM's output, or an improvement of 1.5% over 2016. Oversize tires, for example, are sent to a recycling centre that turns them into a value-added product.

![](_page_50_Picture_5.jpeg)

![](_page_50_Picture_6.jpeg)

![](_page_50_Picture_7.jpeg)

#### **RESIDUAL MATERIALS MANAGEMENT**

We strive to comply with all regulatory requirements governing the production, control and elimination of waste materials. A total 370 tonnes of waste was hauled to purpose-specific landfill sites. Hazardous waste was collected by a supplier and sent for disposal at authorized sites. Of the 1,098 tonnes of hazardous materials produced in June 2016, 705,000 litres of oil was recycled. No hazardous waste was exported.

 Table 20 :
 Amount of Waste Generated

	AMOUNT GENERATED (TONNES)				
ITPE OF WASIE	2012	2013	2014	2015	2016
Residual Materials	372	423	2,030	3,137	3,915
Residual Hazardous Materials	2,322	820	724	1,213	1,098

	AMOUNT RECYCLED (TONNES)				
ITPE OF MATERIAL	2012	2013	2014	2015	2016
Wood	473	358	386	409	458
Paper and Plastic	78	89	102	154	182
Metal and Wire	1,025	899	1,108	999	1,405
Tires (Recyc-Québec)	n/a	8	48	170	28
Oversize Tires	n/a	n/a	n/a	920	1,059
Rubber	n/a	n/a	n/a	142	412
TOTAL	1,576	1,354	1,644	2,794	3,544

![](_page_50_Picture_13.jpeg)

![](_page_50_Picture_14.jpeg)

#### Table 21 : Amount of Recycled Materials

![](_page_51_Picture_0.jpeg)

 Table 22: Greenhouse Gas Emissions

#### **GREENHOUSE GAS EMISSIONS MANAGEMENT**

CMM's primary source of energy for its fleet of equipment operating in the pit and on site is gasoline. We also use electricity, primarily for heating, air conditioning and lighting. An estimate of greenhouse gas emissions was made for the past five years. This estimate is based on fuel consumption data.

	CO <sub>2</sub> EQUIVALENT (TONNES)				
EWISSIONS SOOKCES	2012	2013	2014	2015	2016
Direct Sources <sup>1</sup>					
Mobile Equipment	114,168	122,723	134,659	135,198	145,859
Natural Gas Combustion by Fixed Equipment	6,134	7,965	8,400	7,961	8,230
Diesel Combustion by Fixed Equipment	4,401	4,928	9,511	7,843	3,476 <sup>3</sup>
Propane Combustion by Fixed Equipment	n/a	n/a	160	165	171
Use of Explosives and Sodium Carbonate	10	6	13	11	10
TOTAL	124,713	135,622	152,743	151,178	157,745
Indirect Sources <sup>2</sup>					
Electricity purchased from Hydro-Québec	1,218	2,165	2,180	1,590	1,627
TOTAL	125,931	137,787	154,923	152,768	159,372

#### ELECTRIC VEHICLE CHARGING STATIONS

Adopting sustainable practices is part and parcel of CMM's corporate strategy. We are proud of the four EV charging stations that were installed in the mine's parking lot in fall 2016 to meet the needs of employees and visitors who drive an electric vehicle.

![](_page_51_Picture_7.jpeg)

<sup>1</sup>Direct sources were calculated by multiplying volumes of fuel consumed by the emissions factors provided in the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere, Schedule A-2, available at: http://www.mddelcc.gouv.gc.ca/air/declar\_contaminants/RDOCECA.pdf

<sup>2</sup>LIndirect sources were calculated by multiplying the total kilowatt hours consumed by the conversion factors provided by Environment Canada in the Table A11-6 Electricity Generation and GHG Emission Details for Quebec (2013), available at: https://www.ec.gc.ca/ges-ghg/default.asp?lang=Fr&n=83A34A7A-1 <sup>3</sup>An analysis of fixed equipment diesel consumption prompted changes in our practices, which led to a reduction in diesel consumption.

#### TOWARDS SUSTAINABLE MINING (TSM) INITIATIVE

In 2016, CMM committed to the Towards Sustainable Mining (TSM) initiative. Launched by the Mining Association of Canada, this initiative allows companies to take concrete steps to meet their environmental and social commitments. It comprises a set of tools and indicators to drive performance while ensuring that key mining risks are managed responsibly. The Quebec Mining Association officially adopted the initiative in 2014.

The guiding principles of the TSM initiative are set out in six assessment protocols. Each protocol comprises a series of indicators designed to assess the quality and scope of systems management within establishments.

1	Aboriginal and Community
2	Energy use and Greenhouse
3	Tailing Management
4	Biodiversity Conservation N
5	Health and Safety
6	Crisis Management and Con

The components of the initiative include the four following items:

![](_page_51_Picture_15.jpeg)

Through its commitment, CMM demonstrates that it is acting responsibly and adopting social, economic and environmental practices that reflect the priorities and values of the communities of interest. CMM's first external audit is scheduled in 2018.

Outreach

**Gas Emissions Management** 

*l*anagement

nmunications Planning

To join the TSM program, the first step is to subscribe to TSM Guiding

The next step is to incorporate the program's protocols and supervisory requirements into the organization's activities and management systems.

Every year, the organization assesses its own performance on the basis of performance indicators for the program's six protocols. The performance level for each indicator must be given (between level C and level AAA).

External Audit: Every three years, the organization undergoes an external audit

### **Biodiversity Management**

As part of the TSM Initiative, our team began implementing the biodiversity conservation protocol in 2016. An action plan is also under development to guide the efforts that our team members will have to make.

In addition to this initiative, currently under development, our team took more action in 2016 to manage biodiversity.

### ACTING FOR THE FUTURE: Preparing today for tomorrow's challenges

A number of closure scenarios are currently being studied to begin gradual restoration of the CMM site over the mid-term. In 2016, we advanced studies and field tests aimed at identifying the best possible restoration strategy. Our intention: to select a strategy that allows us to reuse mine waste to restore the site, rather than use natural material, like clay, sand and gravel brought in from outside.

In this regard, we continue to cooperate with three research institutes. Their expertise allows us to channel our thinking toward the best long-term risk mitigation strategy.

#### Institut de recherche en mines et environnement de l'Université du Québec en Abitibi- Témiscamingue (IRME)

With a focus on the environment and tailings management, the IRME develops innovative environmental solutions for the entire life cycle of a mine.

#### > Centre technologique des résidus industriels (CTRI)

The CTRI is a college centre for technology transfer that operates primarily in innovation and technological development as they relate to industrial waste and underused resources. It provides innovative technological solutions, applied R&D and cutting-edge technical trials.

#### > Unité de recherche et de service en technologie minérale (URSTM)

The URSTM, the mineral research and technology service unit, is involved in a research and development project and provides us with support regarding the development of effective mining waste management solutions.

On December 31, 2016, the Government of Quebec held \$49 M in trust to ensure the safe and timely closure of the Canadian Malartic site once mine operations have ceased.

FLORA

During characterization work, our team identified a rare plant near the mixed waste area: *Shepherdia canadensis* (buffalo-berry), a thorny shrub with spreading roots that form thick, uneven hedges. Highly adaptable, it prefers moist but well-drained soil, although it also withstands dry conditions and can grow in moderately saline soils. As needed, our team will take care to transplant specimens of this plant to a new location recommended by the MDDELCC.

![](_page_52_Picture_15.jpeg)

In November 2016, waterfowl (red-throated loons) were caught in a snowstorm in the Abitibi-Témiscamingue region. In the middle of the storm, some of these birds lost their sense of direction north and landed on the ground, mistaking a forest road or railroad for a water body. Since these birds absolutely need a water body to take flight, it was difficult for them to advance and resume their flight once on the ground. During the storm, our team retrieved one red-throated loon that had landed in the mine pit. We contacted the Pageau sanctuary in Amos to have its team of experts take the bird in charge.

#### **CONTINUOUS IMPROVEMENT**

Constantly engaged in improving our practices, our Continuous Improvement Department is pursuing its goal of generating new ideas and monitoring projects to improve our environmental and operational performance. More than 39 meetings, including brainstorming and working sessions, were held on this matter in 2016. We view continuous improvement as a management method that fosters a daily search for effectiveness and progress while enlisting the creativity of the organization's forces. Direct employee involvement in these meetings ensures that we are always action-oriented and solutions clearly identified.

Last fall, our team also developed an analytical tool to establish a clear vision of our operations through value stream mapping. This improvement tool is used to quickly visualize an entire procedure from start to finish while incorporating flows of information and equipment in a way that underscores opportunities for general improvement and facilitates a coherent, effective action plan.

![](_page_53_Picture_3.jpeg)

## ECONOMIC PERFORMANCE

![](_page_53_Picture_5.jpeg)

![](_page_53_Picture_6.jpeg)

## **ECONOMIC PERFORMANCE** Maximizing benefits

Given the scope of its annual operating costs, Canadian Malartic Mine creates a considerable economic footprint. Estimates indicate that it accounts for close to 10% of the regional mining GDP. Our investments, combined with strict cost management, ensure our constant economic growth. Our overall objective is to promote the growth of our organization while remaining transparent with our integrity intact.

#### **PRIORITIZE LOCAL AND REGIONAL BUYING**

In 2016, CMM used over 800 Quebec suppliers, including more than 500 regional suppliers. Our goods and services procurement policy aims to encourage the local and regional economy. Major local and regional purchases are made in the following categories: general contractors, temporary labour, equipment maintenance, dynamiting services, equipment purchases, road vehicle maintenance, engineering services, housekeeping and security services.

In the Town of Malartic alone, CMM spent close to \$41 M on contracts awarded to subcontractors and on procurement in 2016.

#### **CREATE VALUE**

In 2016, CMM generated over \$693 M in expenses, including mining royalties paid to the Government of Quebec.

![](_page_54_Picture_7.jpeg)

#### REVENUE

**OPERATING COSTS** 

#### **REPAYMENT OF LONG-TERM LOANS**

#### **PAYMENTS TO GOVERNMENT**

**Government Royalties** 

Payroll Taxes (paid by employer)

Payroll Taxes (paid by employees)

**Municipal Taxes** 

Mining Leases and Claims

# TYPE OF INVESTMENTEnvironmental ProtectionEnvironmental ManagementEnvironmental InfrastructureWaste ManagementContal

#### \$987,693,411

\$667,478,572

\$66,294,091

\$17,400,000 \$6,824,617 \$28,013,101 \$2,879,481 \$13,455

## **Tab.23**

Table 23 :Direct Economic Value Generated andDistributed by Canadian Malartic Minein 2016

#### **AMOUNT INVESTED**

\$9,162,817 \$12,453,895 \$19,261,399 \$8,554,407

\$49,432,518

![](_page_54_Picture_27.jpeg)

Table 24 :Environmental Investments in 2016

Similar to our ambitious plans for our organization's growth, we have definitely stepped up the pace of our sustainable development. We continued to optimize our practices, and our innovative approach has earned us distinction. Given its structure and innovation, our social responsibility strategy has gone a long way in positioning CMM as an engaged and visionary organization within the industry.

We are committed to maintaining a dialogue with the community and our partners because we firmly believe that respect, collaboration and transparency are values that will enable us to build the future on a solid foundation and succeed together.

- Serge Blais, General Manager

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![](_page_55_Picture_3.jpeg)

![](_page_56_Picture_0.jpeg)

![](_page_56_Picture_1.jpeg)

![](_page_56_Picture_2.jpeg)

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