Diploma Programme
Programme du diplôme
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# Business management
# Case study: Megamin Mining

For use in November 2021

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**Instructions to candidates**

- Case study booklet required for higher level paper 1 and standard level paper 1 business management examinations.



8821 – 5001

5 pages

## Megamin Mining (MM)

*Megamin Mining* (*MM*) is a multinational conglomerate business based in Canada. *MM*'s activities include mining, hotels and properties. Today, *MM* has mines in North America, South America, Africa and Australia, and property in North America and Europe. The commodities it mines include oil, copper, palladium, gold and zinc. Its properties include office buildings in Paris, Dubai and Bangkok and hotels in Berlin, Rome and Geneva.

*MM* was set up as a partnership in the 1890s by two brothers, Jock and Craig MacAskill, to mine coal in Canada. At that time, coal was important in the rapid development of British Columbia and was used to power ships, including British Navy vessels. Following *MM*'s success in the coal industry and growing demand for petrol* for cars in the early 1900s and 1910s, the brothers saw an opportunity to mine oil in the Ontario region of Canada. In 1920, to raise finance for expansion, the brothers converted *MM* to a private limited company and they became directors. They encouraged local business people to become shareholders. The shareholders soon saw the benefits of diversifying, and the business spread risks by mining other minerals: in 1924, *MM* opened a copper mine in Canada, and in 1928, when the board of directors, which also included two major shareholders, saw the opportunity to expand overseas, it opened a copper mine in Chile. To help finance the new mines, make international trading easier and facilitate future growth, *MM* became a public limited company.

In the mid-1930s, the mining industry around the world underwent a period of consolidation brought on by economic depression and political uncertainty. The directors of *MM* could see that their relatively small business would not survive in the industry, so in 1935, the board agreed to a merger with a Chilean mining company, *Chilmin*. Part of the merger agreement was that the name *Megamin Mining* would be retained.

Between 1937 and 1954, *MM* made no new major investments. In 1955, the company's diversification into property began when it seized the opportunity to buy its head office, which it initially rented in a building shared with a hotel in downtown Vancouver, Canada. The American owners of the building had experienced financial difficulty following a property price collapse in the USA, and they offered to sell the building to *MM* at a very low price. *MM* bought the building, retaining its office on the top floors and running the hotel on the lower floors. *MM* has since expanded its property portfolio by buying properties in Europe, looking for opportunities when property markets are weak. Apart from buying property, the business remained unchanged in the 1960s.

In 1972, *MM* took over a palladium mine in South Africa. In the 1970s, catalytic converters, which contain palladium and reduce harmful emissions and pollution, began to be fitted to cars. The demand for palladium therefore increased significantly. To this day, catalytic converters are still fitted to cars. In the 1980s, opportunities arose to open a gold mine in Egypt and a zinc mine in Australia. Then, in 1986, when new licenses for mining tar sands in Alberta, Canada, became available, *MM* did not miss the chance to grow and obtained a license from the Alberta government.

### *MM* today

*MM*'s board of directors now includes Jock's great granddaughter, Isla, as Chief Executive Officer, and Craig's great grandson, Ethan, as Finance Director. The board also includes five other members: two worker representatives and three Chilean shareholders. The board of directors makes major strategic decisions, such as how to improve *MM*'s sustainability. The board usually meets in Vancouver but sometimes in Santiago, Chile; however, the company uses decentralization for day-to-day decisions where possible. For example, the local management

teams of each mine can make decisions about their operations, wages and employment contracts, and the local management teams at each hotel have the freedom to set prices and choose restaurant menus. This delegation enables the board of directors to focus on key issues facing *MM*.

*MM*'s business performance is mixed and is split into four divisions: the Oil Production Division, Hotels Division, Property Division, and Mining Division. Each division has external influences to which *MM* must respond.

**Oil Production Division**

Production of oil from wells is suffering from two factors. First, oil is a fossil fuel and the growth in worldwide demand for petroleum and other oil products is declining as part of a major trend towards reducing carbon emissions in most countries. Oil demand is expected to eventually decline. Second, the oil fields have passed their peak production levels. These factors mean that production costs are increasing.

Production from the Alberta tar sands is also being affected by falling demand for oil products. However, *MM* is reducing its operations in Alberta in response to Canadian concerns about the impact of the industry on First Nations (indigenous) peoples and the environment through damage to ecosystems. There are also concerns about transporting harmful oil and gas products through towns.

Furthermore, oil companies are seen as bad for the environment. *MM* is trying to improve its image by:

- developing energy-efficient production methods
- supporting research into more efficient uses of energy, such as energy-efficient cars
- offsetting carbon emissions by funding reforestation and other environmental projects
- researching diversification into alternative fuels, such as hydrogen
- strengthening ethical values throughout the business, but particularly in oil production.

**Hotels Division**

*MM*'s hotels mainly focus on the tourism market, selling rooms directly to tourists. All the hotels, except for the one in Geneva, have had three disappointing years. Between 2018 and 2021, occupancy rates fell from an average of 80 % to 60 %. Competition from Homehol, an online vacation rental company that hosts a service for users to list their properties for rental (rather than Homehol itself owning the properties), has also been affecting *MM*'s hotel bookings. Return visitor numbers have declined, and comments on review websites have become increasingly negative. Customer complaints include high prices compared with those of competitors, uncomfortable beds, rude staff, buildings in need of renovation, and poor-quality food. Advertising in travel magazines has not increased bookings, nor has a "two for the price of one" promotional offer. *MM* will conduct some primary market research to help identify methods to increase hotel bookings.

**Property Division**

Office rental incomes are high and property prices are increasing in European cities. Hotel property prices are also increasing.

**Mining Division**

The Mining Division sells its entire production business to business (B2B), usually in long-term contracts. The prices of minerals can be volatile, however, and are determined by international commodities markets that reflect supply and demand at any given time.

The demand for palladium has been falling over the last 20 years. This decline was initially because consumers started purchasing diesel cars, which do not have catalytic converters that use palladium, rather than petrol cars. Today, governments around the world are discouraging the use of both diesel and petrol cars for environmental reasons, and sales of electric cars, which do not use palladium, are increasing. As a result, the demand for palladium is likely to continue to decrease. Furthermore, although the palladium produced in *MM*'s mine in South Africa is highly profitable, cash flow can be a problem. **Table 1** shows *MM*'s cash flow for this mine in 2021.

**Table 1: Cash flow for *MM*'s palladium mine in 2021 (in millions of $)**

| | Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 (forecast) |
|---|---|---|---|---|
| Opening balance | 20 | 26 | −15 | −10 |
| Sales (60 days credit) | 50 | 60 | 60 | 70 |
| Maintenance (one month's credit) | 4 | 6 | 8 | 4 |
| Wages (paid weekly) | 30 | 30 | 31 | 32 |
| Major improvements | 0 | 50 | 0 | 0 |
| Other costs (cash) | 10 | 15 | 16 | 14 |
| Closing balance | 26 | −15 | −10 | 10 |

The demand for copper is high and expected to grow by as much as 50 % over the next 20 years. This increase is due to the rise in consumer use of electronics, wider uptake of electric vehicles, increased use of renewable energy sources, and energy efficiency, all of which require significant amounts of copper.

After a fall between 2012 and 2015, gold prices have recovered, so gold production has recently been very profitable for *MM*. However, the company's gold mine in Egypt now has technical problems and some areas of the mine are unsafe, with a risk of flooding if heavy rains fall. Some of the lorry drivers at the mine have threatened strike action because of safety and pay issues. The mine is currently producing below the break-even level, and *MM* is exploring ways in which it could reduce its costs.

## Specific issues facing *MM*

*MM*'s board of directors is also considering three specific issues: employment practices, environmental issues, and expansion into a new section of the mining industry.

### Employment practices at *MM*

Traditionally, *MM*'s employment practices have varied from country to country and are even different within the company's divisions. So, for example, employees in Canada are paid high wages, consistent with general wage levels in Canada whereas employees in Africa received low wages consistent with local wage rates. Employees in the hotels in Berlin, Rome and Geneva have low wages relative to other workers in Europe. Employees' rights are different too:

whereas employees in Europe and Canada expect to be able to belong to a trade union and receive health insurance and favourable employment contracts, employees in some countries have zero-hour contracts, particularly in the mines and hotels, and no trade union protection.

Employees in the Chilean mines are now demanding contracts similar to those in Canada. However, until recently, *MM* has had no difficulty recruiting employees for its Chilean operations and staff turnover is low. The Chilean employees argue that their work creates the greatest profits for *MM*, so they should be rewarded better for it. Meanwhile, managers in Africa are reporting that productivity is declining as a result of falling employee motivation. *MM*'s board is concerned that any wage increases in Chile could reduce competitiveness and profits and lead to similar demands elsewhere.

**Environmental issues**

*MM* needs to respond to national and international policies on climate change. The company has also received negative publicity from environmental groups about its operations, and there have been protests against it at various locations.

*MM* plans to review its environmental policies in response to the expected outcome of the United Nation's COP26, a conference which will update various climate strategies and targets. *MM* is considering stopping activities in the most polluting areas of the business and is planning to set strict climate change targets at corporate, national and local levels for all other remaining areas of the business. To meet these new targets, *MM* will need to improve its methods of data collection on emissions and other environmental impacts. Currently, businesses in Europe adhere to targets on reducing emissions and are closely monitored. However, far less information is collected in other parts of the world. The board of directors is therefore considering an integrated IT network to share information for all of *MM*'s activities.

**Expansion into lithium mining**

The fastest growing section of the mining industry is the extraction of lithium. Major producers of lithium include Australia, Chile and Argentina. Lithium and its compounds have several industrial applications, including lithium batteries, heat-resistant glass and ceramics, lubricants, and additives for iron, steel and aluminium production. The current rapid growth in the demand for lithium has been caused by the increased use of lithium-ion batteries, which are essential for electric vehicles, smartphones and other electronic equipment.

*MM*'s board of directors sees opportunities for major growth in this sector of the industry. However, the individual board members disagree about whether to seek a license for a new lithium mine (probably in Australia), take over an existing lithium producer (possibly in Chile), or enter a joint venture (possibly with a Canadian lithium producer).

* petrol: gasoline

*Companies, products, or individuals named in this case study are fictitious and any similarities with actual entities are purely coincidental.*

**References:**