Financing the Dikulushi Project in the Congo (DRC)
- combining resource quality & risk management capability

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Abstract

Anvil Mining NL brought Stage I of the Dikulushi project, a high-grade copper-silver vein deposit located in the Katanga Province of the Democratic Republic of Congo ("DRC") into production in October 2002. Anvil chose to stage the development in order to keep the initial capital cost low enough to attract the interest of wary project financiers. The project will be an open pit mine for the first four years and then become an underground operation. Stage I processing involves heavy media separation which will be replaced by a ball mill and flotation circuits in Stage II, perhaps as early as the third quarter of 2003. The window of opportunity to proceed with the development of the project emerged following favourable changes to the political landscape in the DRC during the early part of 2001. Prior to this, there had been a period of more than three years of political instability and intermittent military activity.

The Dikulushi deposit is a hydrothermal chalcocite (Cu_2S) vein deposit with an average grade of 8.5% copper and 9.0 oz/t silver. The deposit outcrops at the surface, is metallurgically simple, produces a high-grade concentrate and can be mined initially by open pit methods. The high-grades and very limited technical risk make Dikulushi a high-quality resource. The location of the project however, in a remote part of the DRC, means that the risk profile is dominated by political and logistical issues.

The staged development strategy adopted by Anvil will enable the production of a marketable product in the short term that will provide attractive returns and a logical stepping-stone, with in fact some advantages, into subsequent stages of the development. The key elements in gaining the support of the project financier revolved around demonstrating that the level of political risk had reduced significantly as a result of favourable political events in early 2001 and that Anvil had the capability of managing the likely political and logistical risks associated with the development. In additional, Anvil had to convince the financier that it had the ability to manage the likely operational risk through an appropriate combination of in-house and outsourced resources, including the right choice of critical business partners. The early commitment by the project financier in July 2001 attests as much to the financier's view of the management of the company as to the quality of the resource.

Risk management is the key success factor in the future of the Dikulushi project. As the risk profile is dominantly political and logistical rather than technical, the engineers, metallurgists and geologists on the project have had to modify what might be their more usual approach so that greater attention is given to local social and political risk as well as logistical risk. Often technical managers are uncomfortable dealing with these kinds of risk factors, but without appropriate attention on such issues, a mining project in a Third World country environment will, at best, underperform.

INTRODUCTION

In early 2001, favourable political developments in the Democratic Republic of Congo ("DRC"), following more than three years of political instability and intermittent military activity, began to open a window of opportunity for Anvil to begin pushing ahead with the development of the Dikulushi copper-silver deposit, located in the Haut Katanga Province of the DRC. Anvil had drilled the project in the latter half of 1997 and confirmed an open pittable resource of 1.94 Mt at an average grade of 8.5% copper and 9 ozs/t silver. From a technical point of view (ie orebody configuration, mining, metallurgy) the project was rather simple and this, combined with the high-grades, meant that the project would be economically quite robust. The location of the project however presented some serious political and logistical challenges.

Anvil had completed a desk-top pre-feasibility study in early 1998, following a drilling program, however the full optimised development as a combined open pit and underground operation with ball mill and flotation processing resulted in a capital cost that would not likely be financed given the deteriorating political situation at the time. Anvil therefore went back to the drawing board the following year to investigate lower-cost options that would have a better chance of attracting project financing should the political situation begin to improve.

In August 1999, Anvil contracted Metallurgical Design & Management (Pty) Ltd ("MDM") to carry out a desk-top study investigating three possible low-cost options, a) open pit mining and hand sorting, b) open pit mining and heavy media separation ("HMS"), and c) a pared down ball mill and flotation approach. This study cost US$20,000. The HMS approach, with an expected capital cost of under US$6.0 million, was concluded to be the most attractive option, however the perceived political risk in the DRC remained high at the time and Anvil was forced to continue waiting for some signs of improvement.

Within three months, following tragic events in January 2001, a new President had been appointed and under the new leadership, the country began to move in a different direction that represented a dramatic departure from that of his predecessor. The sequence of positive political developments occurring during the January-March 2001 period provided Anvil with the encouragement to seriously reconsider the development of the Dikulushi project and as a consequence, work began in April 2001 on development plans and testing the appetite of project financiers.

DEVELOPMENT STRATEGY

By May 2001, Anvil had formulated the framework of a staged development strategy that was beginning to attract the attention of RMB Resources Ltd, part of the Rand Merchant Bank Group of South Africa. Anvil's strategy incorporated a number of political, technical and financial considerations.

- Political considerations of development strategy

During the early stages of the conflict affecting the DRC, it was realized that an elevated level of political risk was likely to exist for the foreseeable future and that if Anvil were to successfully develop Dikulushi, and sustain the operation, then a good understanding of the political dynamics and an ability to manage political risk would be needed. The fact that Dikulushi would be a relatively small development and that it was located in a relatively remote and undeveloped part of Katanga had its advantages in terms of visibility and potential for adverse interference. On the other hand, the fact that Dikulushi was only 100 km from the boundary between the DRC government controlled area and the area controlled by the rebel forces presented some possible security issues.

Anvil was of the view that it should begin to move forward with the development of Dikulushi as soon as a significant improvement in the political climate had occurred, and not wait until the situation had improved to the extent that competitors on larger projects would be willing to begin pushing forward. The key for Anvil was to recognize a fundamental shift in the political climate that could provide the chance to develop into a substantial improvement over time. By March 2001, the Company had determined that this "fundamental shift" had occurred and flagged its intention to pursue the development of the project. The next step would be to attract people to the project that would be capable of managing at higher than normal political risk levels. It was this approach combined with Anvil's demonstrated capability of managing the political risk in the

DRC over a period of more than four years, that was instrumental in attracting the attention of RMB Resources Ltd.

- Technical considerations of development strategy

In order to minimize the initial capital cost and keep the financing requirements at an achievable level, a three-stage development approach was chosen, comprising the following elements:

- **Stage I**

  Open pit mining, heavy media separation ("HMS") to produce a concentrate expected to grade 40% Cu and 1,100 g/t Ag,

- **Stage II**

  Open pit mining, ball mill and flotation to produce a concentrate expected to grade 60% Cu and 1,900 g/t Ag, and

- **Stage III**

  Underground mining and a long life operation.

Commissioning of Stage I began in late September 2002 and the first concentrate was exported from the DRC on 9 October 2002 and trucked to the Ongopolo smelter in Namibia. In Stage I, Dikulushi will produce concentrates at an annualised rate of 40,000 tonnes. After smelting the concentrate produces blister copper containing 14,000 tonnes of copper and 1.1 million ounces of silver per year. The capital cost for Stage I was US$6.2 million, which is within US$450,000 of the budget determined as a result of an US$18,000 Definitive Costing Study.

Anvil expects to make a decision on the development of Stage II before the end of 2002 with the intention of commissioning ball mill and flotation circuits during the third quarter of 2003. The development of Stage II will result in an increase in mill recoveries from an expected 74% in Stage I to approximately 93-95%, and a marked increase in concentrate grades from 40% to 60% copper. The latter will result in reductions of approximately 35% in both smelting charges and transportation costs per pound of copper output. These attractive commercial benefits have prompted Anvil to plan for the development of Stage II at the earliest possible opportunity.

- Financial considerations of development strategy

During January 2001, as a result of a prolonged adverse political risk situation in the DRC, Anvil's share price had fallen to 2.5 cents (Aus) and the company's market capitalization had slumped to a mere A$3.1 million. The company's cash reserves at the time were A$400,000 and the capacity to raise equity in the market was extremely limited.

Not long after the beginning of the DRC conflict in August 1998, Anvil began to seek new mining opportunities in more attractive investment destinations elsewhere in Africa. The focus turned to Ghana and by late 1999, Anvil had acquired a 20% equity interest in Bogoso Gold Limited, owner and operator of the Bogoso Gold Mine in Ghana. Canadian gold company, Golden Star Resources Ltd ("Golden Star") was the majority equity holder with a 70% interest in the project, with the Government of Ghana holding the remaining 10%.

With an improved political situation in the DRC in early 2001, and subsequent developments with Golden Star's activities in Ghana, a deal was negotiated in April 2001 that would see Anvil exchange its 20% equity interest in Bogoso Gold Limited for a 7% equity interest in Golden Star.

The exchange provided Anvil with 3 million shares in Golden Star, which resulted in substantially increased financial flexibility to pursue the development of Dikulushi and, most importantly, the capacity for Anvil to fund its equity share of the development costs under a project financing arrangement, as well as providing a substantial portion of the working capital requirements during the early operational stage.

With this improved financial flexibility, Anvil set about seeking approximately US$4.5 million in project financing. By July 2001, the structure of a staged financing arrangement had been put in place with RMB Resources Ltd, which provided the immediate funds for Anvil to initiate certain aspects of the development of the project, and agreement in principle on the terms and conditions for a Project Financing Facility of US$4.5 million. In view of the timeframe for the process of smelting and refining copper concentrates, additional funding of the order of US$1.0 million would be required for working capital and this would in time be secured through a trade financing arrangement as part of an off-take agreement.

CRITICAL SUCCESS FACTORS FOR SECURING PROJECT FINANCING

The ability of Anvil to project finance the development of Dikulushi, with its remote location and host country characterized by a high degree of political uncertainty derives from two critical factors; the attractive resource quality and the perception of the risk management capabilities of the company's management.

- Resource quality

The quality of the Dikulushi resource is exceptional. Drill evaluation work by Anvil in 1997 confirmed a resource with an average grade of 8.5% copper and 9 ozs silver per tonne. The orebody outcrops at the surface and has an ideal orebody configuration for both open pit and underground mining. The orebody is fault controlled, has relatively sharp contacts and is up to 30 metres wide.

The main ore mineral is chalcocite with the silver occurring mostly in solid solution, a factor which simplifies the metallurgical processing. Stage I heavy media separation processing produces a high-grade concentrate grading 40% copper and 1,100 g/t silver. Stage II flotation processing will produce an even higher grade concentrate expected to average 60% copper and 1,900 g/t silver, and these higher grades will significantly reduce smelting charges and transportation costs per pound of copper output.

The Dikulushi orebody is open at depth with some of the deepest intersections at around only 165m vertical depth averaging 16% Cu and 522g/t Ag over a width of 16.7 metres; grades and widths which represent very attractive underground resources which are yet to be closed off at depth by further drilling.

The Dikulushi project clearly has attractive economics; strong cash flows, high internal rates of return, short payback period and high debt service ratios. Notwithstanding these very attractive attributes, the location of the project in the DRC, with its logistical and political risk has presented challenges for project financing.

- Risk management capabilities

During the years that Anvil has been involved with the Dikulushi project, there have been several major political and military events, which have affected the DRC, some for prolonged periods. During all these periods of instability, Anvil has demonstrated an ability to manage the political risk issues. Anvil's tenure on the Dikulushi project and the surrounding Mining Convention area has never been threatened. The experience has been one of delays with the bureaucratic process, sometimes inordinate delays, but never a situation that could be described as a risk to the company's tenure. This is a point not fully appreciated in the market.

It has been the company's capability to manage the so-called "political risk" that has been a key element in securing project financing. Over time, the company will develop a risk mitigation culture at Dikulushi that will empower employees at all levels with a capability for managing elevated levels of a range of risk elements. In the next section of this paper, the risk profile of Dikulushi is examined and Anvil's approach to risk mitigation, which significantly influenced the ability to secure project finance, is outlined.

DIKULUSHI RISK PROFILE

- Dominant Categories of Risk

The dominant categories of risk associated with the development of resource projects in Third World and Developing Country environments most often concern political and logistical risk issues. Political risk includes conditions or events brought about by circumstances outside the company's control by the actions or inactions of government or by socially generated actions, which result in financial loss. Logistical risk includes, *inter alia*, the ability to efficiently continue to access the project site, the ability to cross international boundaries to transport product to markets and ability to bring goods and services to the site.

Other risks can include, *inter alia*, technical risk (exploration risk, mining risk, metallurgical risk etc), legal risk (tenure, fiscal terms and conditions etc), market risk (metal prices, cost of equity capital etc), and social (local engagement process) and environmental risk (accidental discharge). However these generally have greater predictability and companies generally have a greater capacity to manage these categories of risk. Sub-Saharan Africa also carries a significant, but manageable health risk.

The Anvil experience in the DRC makes it important to avoid generalities when determining the nature and importance of potential risk factors, and to look critically at the specific risks that relate to the project under consideration. The characteristics of the company undertaking the investment and the nature of the contemplated investment have as much to do with defining the risk, as the characteristics of the host country and its government. An unacceptable risk for one company may in fact be a routine management issue for another. A risk associated with one project, may not apply to another, notwithstanding that the two projects are in the same industry. Furthermore, risk categories are not always clearly defined and one risk category can easily merge into another. In addition to the regional political risk issues present in Third World and Developing Country environments, there are also local political risk issues which are potentially as significant.

- Changing Character of Political Risk

Risk is not a static concept, particularly political risk. During the 1960s and 1970s, the dominant political risk was nationalization and expropriation (Bradley, 1977). The propensity for such

action declined rapidly during the 1980s as governments realized that such actions were not delivering the desired results. As these sources of political risk have declined, others such as ethnic and religious issues leading to civil disturbance and armed conflict have tended to increase, particularly since the end of the Cold War (Moran, 1998). Ethnic issues have been a major contributing factor in the recent conflict affecting the DRC.

An important aspect of investing in countries which have an elevated level of political risk is the "risk-reward balance" and the significance of "first mover status". Often in Third World and Developing Country environments, a change in the political outlook can unlock advanced, high-reward opportunities that have been held up for years, sometimes decades. An early presence on such projects at a time when there is a certain amount of risk can provide access to attractive starter-projects and the operational experience to be able to step into larger projects as they become available through privatization and other processes. Such considerations are part of the justification for Anvil pursuing opportunities in countries such as the DRC.

- Political Risk or simply Political Events

Political risk includes conditions or events brought about by circumstances outside the company's control by the actions or inactions of government or by socially generated actions, which result in financial loss. Issues include expropriation and nationalization, currency inconvertibility and transferability, breach of contract, political violence, war and terrorism. However, one must distinguish between political events and political change that may have a negative effect on the company's activities. The two are not necessarily the same.

MANAGING POLITICAL RISK

- Regional Political Risk

When considering political risk in the DRC, and its management, it is useful to remember that the DRC is a desperately poor country; it has physical infrastructure which is in a poor state; it has institutional and bureaucratic infrastructure which lacks capacity, and it has a population in excess of 50 million. At the same time, it is trying to make the difficult transition from a largely state controlled economy to one based on free market principles, as well as the transition from a non-democratic political system with a very centralised power base that has often been largely ethnically based, to one which is based on more democratic principles. Such fundamental changes are difficult to make and one simply cannot expect a smooth transition. The key for foreign investors who feel that the leadership is trying to head in the right direction, and Anvil certainly supports this view, is to find ways to manage the political risk.

Small company advantage

Notwithstanding that Anvil is a small company, and perhaps to some extent because it is a small company, it has been able to find ways to effectively manage the political risk issues that have surfaced in the DRC. Issues, which in the company's experience, have tended to be viewed from the outside as serious political risk issues, have from the inside been seen as annoying and frustrating delays which should be more accurately described as management issues.

Anvil's long-term presence in the DRC, and the political capital it has accumulated at senior levels in the bureaucracy and the government, should help to minimize the risk should a sudden political change occur. This has been the case in the past, and will no doubt stand Anvil in good stead in the future.

Weaknesses in Bureaucratic Capacity

Bureaucratic delays and inaction because of weaknesses in business culture and bureaucratic capacity have historically been a key political risk issue associated with investing in the mining industry in the DRC. This is often an overlooked political risk element that can result in considerable additional cost to investors who are committed to opportunities in the DRC and has historically been a major cause for prospective investors simply giving up to go elsewhere. Ironically, it is one of the simplest political risk issues to rectify, but the change must come from within the government and the bureaucracy.

Notwithstanding the inherent weaknesses in bureaucratic capacity, Anvil has managed, largely through a very persistent approach, to continue to put in place the seemingly endless stream of documentation required to formally complete its Mining Convention, the security documentation for the project financing facility and all the bits and pieces required to be able to commence a mining operation and export the product. The support from the Government in these endeavours has generally been reasonably good, although at times the chasing-up of documentation has been frustrating exercise. In a country trying to emerge from the problems of the past, it represents an acceptable risk, which is viewed in Anvil more as a management issue rather than a significant political risk issue.

Legal Framework and Documentation

Anvil has a Mining Convention which was signed with the Government of the DRC in January 1998, and ratified by Presidential Decree issued in February 1998. The emergence of political unrest and military conflict in mid-1998 delayed the finalisation of the peripheral documentation which was eventually completed only in May 2001. The Anvil Mining Convention was one of the few Conventions to be in full force and effect prior to the introduction of the new Mining Code approved by the Government in June 2002, following two and a half years of involvement by the World Bank.

The Anvil Mining Convention covers an area of 20,000 km^2 and has an initial term of 20 years. It has a modern force majeure clause and its legal interpretation is in conformity with the principles and norms of international law. Issues in dispute can move quickly to international arbitration under the rules of the International Centre for the Settlement of Investment Disputes (ICSID), which provide for the resolution of technical disputes by outside experts and arbitration of other matters under international rules before a neutral forum. It has a stabilization clause and benefits from a "more favourable legislation" clause. It also has a waiver of sovereign immunity and a clause requiring mutual consent for any changes to the terms and conditions. The Anvil Mining Convention therefore has all the terms and conditions expected of modern international mining agreements (Moran, 1998, Comeaux & Kinsella, 1997; Andrews, 1991) and is structured in a manner to provide adequate access to protection under international law. The legal risk has been effectively mitigated through the completion of appropriate documentation.

- Multilateral Investment Guarantee Agency

The Multilateral Investment Guarantee Agency ("MIGA") is an agency of the World Bank whose role is to facilitate foreign investment in Third World and Developing Countries by alleviating investors' concerns about non-commercial risk with the provision of political risk insurance. MIGA requires insured projects to meet development criteria and compliance with environmental, anti-corruption and workers' rights standards (Hayes & Cummings, 2001).

MIGA has a cooperative underwriting program ("CUP") which allows private insurers to participate in MIGA coverage. The CUP program operates much the same way as the A & B loan structures used by the International Finance Corporation ("IFC") in its project financing. MIGA stands as the insurer of record and allocates portions of its insurance to other public and private insurance agencies which participate under the risk mitigating umbrella of MIGA.

Australia is a full member of MIGA and this provides access for Anvil to the facilities of MIGA. The DRC has been a member of MIGA for some years and became a financial member in early 2002. In the context of the political imperatives that multilaterals such as MIGA have towards so called "countries coming out of conflict", Anvil is currently working with MIGA to put together political risk insurance for Stage II of Dikulushi. The involvement of a World Bank agency in Dikulushi will send a powerful signal to the Government of the DRC and to the market regarding political risk mitigation on the project.

- Local Political Risk

Anvil is sensitive to the need to undertake the development of mineral projects in Third World and Developing Country environments in a socially and environmentally responsible manner.

Human Resource, Social and Infrastructure Development Programs

From the start of the construction works in February 2002, Anvil was aware of the need to engage the local community in a meaningful way. Anvil is also committed to human resource training that will provide the opportunity for local employees to develop their full potential and take on more and more challenging roles during the course of their employment. In time, programs will be implemented that will provide for appropriate social and infrastructure development in the region of the company's activities. Anvil is acutely aware that the interaction with the local community is a critical and sensitive issue, which needs to be handled with skill. If handled inappropriately, the result could quickly be a disillusioned and hostile local population requiring a considerable period of time to realign.

Sustainable Development Programs

Anvil will also undertake sustainable development projects that will bring self-sustaining and longer term benefits that should continue well after the Dikulushi mining reserves are exhausted and the mine has closed down. It is the intention to commence such programs early in the operation of the mine in order to provide the best chance for them to being implemented successfully.

Capacity to Fund Development Programs

In order to fund the social, infrastructure and sustainable development programs associated with the Dikulushi project, Anvil has made an allocation of 10% of the economic benefit from the project, specifically for this purpose. It is expected Anvil will work with Non-Government Organisations ("NGO's") which are already active in the region, such as World Vision, Médecins Sans Frontières and Caritas to deliver such programs. The delivery of these programs is also viewed as a critical success factor in developing mining projects in such areas, and such an approach should contribute significantly to minimising the potential for local political risk.

MANAGING LOGISTICS & OPERATIONAL RISK

- Logistical Risk

Logistical risk is probably the second most important risk after political risk facing the Dikulushi project. Logistical risk relates to the long supply line, the lack of nearby engineering and other support facilities and the need for Anvil to establish its own transportation facilities on Lake Moero. An access route across Lake Moero was chosen because the roads in the DRC between Dikulushi and Lubumbashi (400 km distance) are in an extremely poor state of repair, and this situation is further complicated by heavy seasonal rainfall. Fortunately, logistics is an element of the overall risk profile over which Anvil can position itself so as to have a large measure of control.

Trucking Operation

Dikulushi will produce approximately 40,000 tonnes of concentrate per year, which will be shipped to smelters in Southern Africa for further processing. A major element of the logistics risk will be substantially reduced by Anvil owning and controlling the barging operation across Lake Moero and having appropriate partnering arrangements for trucking and procurement. Concentrate shipment is a major undertaking and one which has been outsourced to the Rainbow-Kasembo Group, transport contractors with considerable experience in the Southern African environment.

The transport contractor is providing the capital equipment thereby reducing the up-front capital cost for Stage I of the development. The private transportation market in this part of Africa is well developed and highly competitive. Again, a large part of the financial and operational risk associated with this aspect of the project will be carried by an experienced operator best positioned to handle this risk.

- Operational Risk

Anvil has outsourced the mining operation, on-site assay laboratory, and in-pit drill and blast operations and other functions which are appropriate considering the experience and capabilities of potential partners.

Mining Operation

The open pit operation will require the mining of approximately three million tonnes of material per year. Although this will not be a large operation, it is of a size sufficient to have attracted the interest of operators from several Southern Africa countries, particularly those who view Dikulushi as a starter operation that will lead into more sizeable projects elsewhere in the DRC as the industry redevelops.

The Dikulushi open pit mining operation has been outsourced to mining contractors Con Roux (Botswana) [Pty Ltd]. They are providing the capital equipment with the result that Anvil has laid-off a large part of the financial and operational risk of this aspect of the project to the mining contractor.

Metal Off-take

An off-take agreement has been entered into with Swiss metal trading group, Republic House AG ("Republic House") who have agreed to take responsibility for the concentrate on delivery to the smelters in Southern Africa and to make a preliminary payment to Anvil at the time of delivery.

This arrangement effectively provides Anvil with a substantial trade financing facility and passes over the marketing of the product to a group best positioned to manage this risk.

Other Risks & Mitigation Measures

There are other risks associated with the development of Dikulushi including technical risk, personnel and property risk, health risk, and a number of others. Anvil has positioned itself to manage these risks internally or through insurance or other means. The degree to which Anvil will absorb certain risks reflects the company's view of its capabilities to manage such risks.

CRITICAL BUSINESS PARTNERS

Anvil views the careful choice of critical business partners and the development of partnering arrangements as very important in its efforts to successfully develop Dikulushi and an important way to reduce risk.

- Project Financing

The involvement of RMB Resources Ltd in the project financing for the development of Stage I is viewed as a partnering arrangement that will provide the financial backing to ensure that Dikulushi is taken through to full production, and the support to ensure that the full potential of the project is developed. When RMB Resources agreed to proceed with a project financing facility in July 2001, it was done without the need for a bankable feasibility study, without Anvil having done any metallurgical testwork on the HMS approach (previous work had been on flotation) and without having been to the project site, nor for that matter, the DRC.

The willingness of RMB Resources to take on the project financing is confirmation of the economic robustness of the project, and their view of Anvil's management capability and represents a significant concession that allowed Anvil to proceed with the development of Stage I at the earliest possible time.

- Engineering & Construction

The engineering and construction contract for Dikulushi Stage I was let to Metallurgical Design & Management Pty Ltd ("MDM"), a South African company with considerable experience in the development of small and medium sized mining projects in Africa.

Anvil's cash reserves at the time the first part of the contract was awarded did not allow the first payment of US$500,000 to be made in cash. Anvil and MDM agreed on an arrangement that provided for Anvil to transfer an equivalent amount in shares in Golden Star Resources Ltd to MDM, in return for a) an allocation of 750,000 one year options in Anvil Mining NL and b) agreement to enter into a negotiated contract for the engineering and construction of Dikulushi Stage II. In addition, MDM agreed to provide a performance guarantee for the HMS processing plant (notwithstanding that Anvil had not done any HMS metallurgical testwork on Dikulushi ore) and a bank guarantee for a cost-overrun facility for US$500,000 should it be required.

The arrangements with MDM constituted a partnering arrangement under which MDM took on certain risks in the development of the project for which MDM was better positioned to manage.

- Off-take

The involvement of Swiss metal trader, Republic House AG on the off-take and transportation issues is also viewed as a partnering arrangement that provides Anvil with a great deal of flexibility in terms of where the concentrates are to be treated and access to substantial marketing skills. Republic House will in time take delivery of the Dikulushi concentrates at Nchelenge on the Zambian side of Lake Moero and take over responsibility for transportation issues from Nchelenge to the smelter. This will enable Anvil to lay-off the risk associated with managing most of the transportation issues and bring forward the timing of production payments to Anvil.

- Major Shareholder

Anvil's major shareholder, First Quantum Minerals Ltd ("FQM"), a Canadian mid-tier copper producer with substantial interests in Zambia and the DRC, has also been a critical business partner. The experience of FQM in neighbouring areas has been valuable in formulating a low-cost strategy for the development of Dikulushi. In addition, FQM has provided substantial financial assistance at times when the equity markets have not been so forthcoming.

- Multilateral Institutions

Anvil is currently pursuing the involvement of MIGA, one of the World Bank agencies for subsequent stages of the development of Dikulushi. There is general acceptance that such involvement leverages private sector capital in a way that straight loans cannot, and also tends to deter arbitrary government action.

For countries classified as "coming out of conflict" the World Bank and the IMF now have a greater willingness to provide more immediate assistance. For example, in the case of the DRC, World Bank assistance earlier this year resulted in the completion of the drafting of new mining legislation. At the end of 2001, the World Bank re-established a permanent presence in Kinshasa, the capital of the DRC after an absence of more than 10 years. These steps are an indication of a greater willingness of the multilaterals to engage countries in difficult circumstances much earlier than has historically been the case and this has positive implications for private investors.

- Stakeholder Synergy

It is becoming more apparent that the goals of political stability and a chance at economic development in the troubled areas of the world require a much greater degree of coordination and flexibility amongst all the stakeholders; the relevant governments, the multilateral institutions, civil society and private enterprise.

In countries "emerging from conflict", peace and subsequent economic development need to occur in quick succession if peace is to be more than a relatively short-lived event. The multilateral institutions can play a dual role; firstly in promoting peace and stability (with UN, IMF & World Bank), and secondly as a catalyst for the promotion of foreign direct investment and economic revival (with World Bank, IFC & MIGA). Historically, the efforts of stakeholders have tended to be somewhat individual and as a result important synergies have simply not been released. The opportunity exists for a much broader based and interconnected involvement by all stakeholders in the economic revival of distressed but emerging countries. Such would significantly reduce many of the risks encountered by individual stakeholders.

CONCLUSIONS

Anvil's seven years of involvement in the DRC has provided some understanding of the political dynamics of the country and surrounding region, and considerable experience in managing the

challenges associated with working in a poor country undergoing the difficult transitions to a more democratic form of government and to an economy run on free market principles. It has also given the company an appreciation for the political and logistical challenges associated with developing a new mine in a relatively remote location in this part of Africa. It is an appreciation of these factors in conjunction with the resource quality that have made it possible to project finance Dikulushi at a time when most other new integrated mining projects are still standing still.

Anvil is clearly aware that there is risk associated with developing Dikulushi, but is also of the view that the potential rewards provide an appropriate balance, and it is this perception that has been the driving force that has maintained Anvil's commitment to the development of this project, notwithstanding the unsettled political situation in recent years.

The Anvil approach to picking the right time to move ahead has involved two basic considerations; firstly, monitoring the overall political risk in the DRC and waiting for it to reduce to an acceptable level, and secondly, working to identify and quantify the specific risk issues and putting in place strategies to manage these risks. Technical personnel on site are being encouraged to focus more attention than usual on the identification and management of risk as risk mitigation is considered the key success factor to developing the Dikulushi project and sustaining the operation.

Anvil has identified risks that the company is willing to accept itself, and risks it considers best addressed by laying-off to operational partners who have a demonstrated capability for handling particular risks. The right choice of critical business partners has been an important element of the risk mitigation process. The opportunity also exists to bring together various stakeholders with interests in the outcomes for the DRC so that important synergies are released and overall risk is reduced.

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