

## 3.0 MINING

### 3.1 Summary - Mining

Mining and exploration in Fiji has been dominated by gold production from Vatukoula mine in the past, although significant other sector revenues come from industrial minerals such as sand and gravel, quarried stone and coral sand.

The mining and quarrying sector on average accounts for 1.4% of GDP. A sluggish performance in 2005 saw the sector decline by 30.7%, and its contribution to GDP falling to 1%. Prospects for the sector looked bleak when operations at Emperor Gold Mine (EGM) in Vatukoula was shut down in early 2006 to allow a reorganisation aimed at bringing the mine back into profitability. While the shut down was supposed to be temporary, a management decision was taken in December 2006 to close the mine, citing the inability to generate viable returns as the central reason for closure. For 2006, gold production declined by 49.2%. The EGM was back into operation in 2008.

### 3.2 Policy and Regulations

#### ➤ Features of national mining codes or mineral industry code

The Mineral Resources Department (MRD) is a statutory regulating authority/body that regulates the mining industry in Fiji and is the custodian of the following Acts & Regulations:

1. Laws of Fiji Chapter 146: Mining Act & Regulations – guides and regulates activities relating to prospecting for and mining precious metals and other minerals in Fiji
2. Laws of Fiji Chapter 147: Quarries Act & Regulations – provides for the better regulation of Quarries and quarrying activities
3. Laws of Fiji Chapter 148: Petroleum (Exploration & Exploitation) Act & Regulations – guides and regulates activities relating to the exploration for and exploitation of petroleum resources
4. Laws of Fiji Chapter 189: Explosives Act & Regulations – an act that regulates the manufacture, use, sale, storage, transport, importation and exportation of explosive substances
5. Laws of Fiji Chapter 149: Continental Shelf Act & Regulation – an Act that makes provisions for the protection, exploration and exploitation of the natural resources of the continental shelf of Fiji and of areas within the territorial limits of Fiji

It would also be worthy to note the following:

1. A draft Mineral (Exploration & Exploitation) Bill was developed in 2006 with the final draft awaiting Cabinet's approval. Once gazetted, this will result in the revocation of the Mining and Quarries Act.
2. Due to increasing commercial interests in offshore mineral exploration in Fiji, a moratorium is currently in place whilst work progresses on the development of Fiji's Offshore Mineral Policy to control the exploration and mining of offshore mineral resources. This policy will be guided by the Madang Guidelines, a set of international offshore mineral guidelines that was

developed ten years ago during an Offshore Mineral Policy Workshop that was coordinated by South Pacific Applied Geoscience Commission (SOPAC) and held in Madang, PNG.

3. To date, MRD have issued 7 petroleum exploration licenses. Interests in Petroleum have been boosted by a report titled “Petroleum Potential In Fiji” which was written in 1993 by a Jonathan Rodd whilst engaged as Petroleum Coordinator for SOPAC, which is based in Fiji. In brief, the report indicated the existence of geological structures in Fiji with a high probability that these geological structures are oil-bearing.

➤ **Fiscal policies for investments and counteracting market fluctuations**

As part of our current Government’s vision for Sustainable Economic Growth, MRD endeavours to vigorously promote Fiji’s Mineral Policy, with its primary aim being to provide potential investors with a clear, stable and transparent guide to investing in Fiji’s mineral sector. The production of the Mineral Policy statement was encouraged by the Ministry of Commerce, Trade, Industry and Public Enterprise, which, in 1996, produced Fiji’s first general Investment Policy Statement (IPS).

Fiji takes the position that the major inducement to attracting mineral sector investors is the opportunity to obtain a return on investment commensurate with the risks faced. In developing the fiscal framework, the Government has sought to create an internationally competitive package of interrelated measures, which achieves the dual goals of investment promotion and equitable returns to the people of Fiji under a variety of market circumstances.

Additionally, Government also accepts that mining is an unusually high risk industry and private investment tends to be attracted to those areas with good geological potential, transparent fiscal policies and political stability. Hence the development of the competitive and transparent Fiscal Policy that will enable investors to achieve returns, taking into account the risks that their investment faces.

Fiscal/tax concessions are subject to approval by the Minister for Finance based on individual case-by-case basis

➤ **Regulations and mechanisms for compliance and monitoring**

The mining industry is primarily regulated by the Mining Act & Regulations, although there are supporting statutes, such as the Quarries Act and the Explosives Act. These Acts are administered by the Mines Section and the Mines Inspectorate within MRD.

For the purpose of the on-going monitoring /compliance programs, Fiji adopts a pragmatic policy towards compliance with acceptable socio-environmental standards and pollution abatement technology. Government places more emphasis on mining companies complying with agreed emission levels, than with the methods of abatement to achieve compliance. This then provides investors the flexibility to choose measures which will reduce pollution levels in the most cost effective manner, subject to Government approval.

All Prospecting Licences and Mining Leases are subject to established reporting requirements and regular on-site inspection which is undertaken by MRD's Mines Inspectorate officers. This is to ensure all activities undertaken are in adherence to statutory requirements as specified in the relevant Act(s).

As stipulated in the Exploration and Mining Policy, extensions to Prospecting Licences are normally available, providing all licence conditions have been met. Extensions are subject to the same conditions as apply to initial applications, however, in the case of an extension, it is expected that minimum exploration expenditure will significantly increase with each successive extension.

Prospecting License holders have a right to progress from prospecting to mining if they have complied with the license conditions and they have proven that a minable resource exists. Permits to Mine (for artisanal, small & middle-scale mining) can be issued for a maximum of 2 years, and are renewed annually. All leases are renewable but the renewal period depends on the size of the proven resource. Thus, exploration and development is a prerequisite of any Mining Lease holder.

➤ **Guidelines for artisanal, small and medium scale mining**

Artisanal, small and medium scale mining guidelines are stipulated in the Mining Act Cap 146 through the grant of a Permit to Mine. Permit to Mine is granted for a period of 2 years and may be extended for a period of 1 year.

Every applicant for a Permit to Mine shall report fully to the Director of Mines the nature of the mineral deposit, submit a scheme outlining the extent of the proposed operation and produce evidence to the satisfaction of the Director of Mines that the applicant has the working capital necessary to carry out such a scheme.

➤ **Public/Stakeholder consultation and participation in decision-making related to mining**

History clearly shows that mineral sector developments offer unique benefits as well as pose special problems for communities adjacent to mineral deposits, and Government views the direct participation of residents as an integral part of a successful long term relationship. The rights of landowners and immediate stakeholders are enshrined in Fiji's Mining Act & Regulations (Cap 146).

From early in the exploration phase the project sponsor and Government, through the Ministry of Fijian Affairs, should collaborate on a public information and education program about the anticipated nature and impact of the project. Government is mindful that premature release of information may unduly inflate residents expectations, and will be guided by mining company views on when certain information may appropriately be released. However, the Government of Fiji believes that a regular information flow needs to be established fairly early in the project cycle to avoid misconceptions and unwarranted rumours about potential mine development. Once the project has come into operation, mine management is urged to consider establishing resident liaison committees

to facilitate information exchange and to provide residents with a forum for airing their views.

The Housing, Social & Regional Impacts Policies further clarifies the importance of land-owners/public consultation and participation in decision-making related to mining projects.

➤ **Public governance and transparency in the mining sector**

Fiji's exploration and mining administration system is open and unbiased. The guiding principle is that exploration and mining rights are given to any candidate, who by merit, can show Government that they have the capability to carry out an agreed upon work programme. In the case of multiple applicants for a tenement, rights are allocated to the first qualified applicant. This system supports and protects the rights of all investors, both local and foreign, to prospect, explore and mine their mineral discoveries. Investors rights to mineral tenements, and their security of title are enshrined in Fiji's Mining Act and Regulations (Cap. 146).

### **3.3 Mining Best Practices**

➤ **Environmental Impact Assessment (EIA) and monitoring of all phases of mining operation (exploration, project development, mine operation and mine closure)**

The Environment Management Act (2005), administered by the Fiji Environment Department, classifies mining projects/operations as “significant waste dischargers”. Therefore, for any new mining project proposal (including exploration), an EIA study needs to be undertaken with an Environment Management Plan (EMP) formulated to mitigate environmental issues highlighted in the EIA report. All costs are borne by the mining project developer.

One of the major prerequisites for the approval of a Prospecting License or Mining Lease application is the approval of the EIA/EMP by the Dept of Environment. For current prospecting activities/mining operations, relevant waste discharge permits apply. Additionally, the MRD's Environment Division carries out on-site environmental inspections to ensure waste emissions are within the discharge permit/mine environmental release guidelines and comply with socio-environmental standards, which are benchmarked against international standards/best practices.

Developers are required to post a refundable bankers guarantee, as surety of best practice. The amount of the bond will be determined by the MRD, in consultation with the Dept of Environment, according to the element of risk associated with the project. The full bond or a partial amount thereof may be used to remedy unacceptable environmental impacts of the mining project, or may be used as a penalty for late or non-remediation of remediable impacts identified during Environmental Impact Assessment process.

This is in line with the Government's Sustainable Development Policy.

➤ **Private Public Partnership PPP for sustainable mining**

Government's main aim for the mineral sector is to ensure that developments proceed in a sustainable manner. Sustainable mineral sector projects are those that effectively incorporate community participation during the corporate decision-making process, that ensure an equitable distribution of the benefits arising from mine developments, and that, having carefully assessed the socio-environmental impacts, minimise these impacts.

➤ **Emergency Response Plans and Preparedness at the local level**

It is a requirement that all mining operations develop a Mine Safety Management Plan (MSMP) incorporating an Emergency Response Plan, which is reviewed and passed by the MRD or consultants. Contents of the MSMP include:

- The management structure
- How risks are to be managed
- Arrangements for the safe use of plant and electricity
- Contractor Management Plan
- Emergency Plan
- The O.H.S Policy for the site and it's objectives
- The arrangements for training, instructing and informing persons on O.H.S matters
- The arrangement for supervision and communication
- The arrangement for supervisors skills upgrade in terms of on-site risk assessment and developing section emergency response plans
- Induction/training arrangements on site safety rules for any site visitors or new employees
- The establishment of safety guidelines and evacuation procedures
- The arrangement of having mock drills to test the response and awareness of employees (e.g. fire drill – surface & underground, stench gas drills etc).

➤ **Risk assessment of mines and mining activities**

Due to the hazardous nature of mining operations, the Government supports the promotion of risk assessment approach to mine safety, which borders on being pro-active and the subsequent implementation of preventative measures rather than being re-active and implementing corrective measures.

As part of the MSMP requirement, mining project developers are encouraged to ensure all employees undergo formal risk management training and are equipped with the necessary knowledge and tools to be aware of the risks that are confined to their respective work areas/work sites.

➤ **Rehabilitation of affected communities and life-supporting ecosystems, including mine site decommissioning**

Wherever possible, mines are expected to rehabilitate progressively during their operation. Government believes that, ultimately, this will reduce the total costs of rehabilitation. In line with Government's adoption of the precautionary principle, and to ensure that sufficient funds are available to complete rehabilitation at mine closure, the

mining project developer will be expected to make contributions to a Mine Closure and Rehabilitation Fund. The parameters and objectives of this fund will be established as part of the comprehensive Development Agreement, prior to mine construction. Contributions to the fund can be flexibly organised to reflect debt repayment or cyclical factors but the fund must represent a good faith effort by project sponsors to make financial provision for the maintenance or restoration of the mining area/community after the cessation of mining. The final state will be ascertained from the outset, and the repaired state will be subject to an impartial assessment, to ensure that it meets final state specifications.

➤ **Technological, institutional and social initiatives for protecting the health of mining workers**

Fiji's occupational health and safety provisions pertaining to the mining industry is enshrined in the Mining Act and Regulations. Where mining companies can show compliance with the regulations, and application of best-practice work standards, a system of self-monitoring will be developed in consultation with the Mineral Resources Department. This is based on the premise that safe working conditions lead to improved and efficient production in mining.

The Government believes that safety provisions are part of the framework for responsible mining and mining project developers are expected to ensure the creation and maintenance of a safe, productive and beneficial work environment by the formulation of the mining project vision, mission and objective statement based on.

- Ensuring environmentally responsible mining
- Ensure that mine development results in benefits to workers and affected communities
- Ensuring good governance

➤ **Mine Closure Planning (Land use plans and site rehabilitation, site safety, decommissioning, waste dumps & tailings, site water management, off-site infrastructure, community socio-economic program and employees)**

The laws of Fiji are very broad in terms of mine closure. Project developer's obligations in terms of environment restoration, community rehabilitation, alternative livelihood, care and maintenance are not clearly defined in the Mining Act & Regulation (Cap 146) and in the mining license/lease.

There is no backing legislation to ensure the mine developer(s) oblige and comply with mine closure provisions based on international standards/best practices.

As such, the best approach that Government has implemented is ensuring that mining companies set up Trust Funds to help in rehabilitation work, promotion of alternative livelihood for employees and mining communities and also to ensure all other major areas in relation to mine closure are addressed.

A second approach is the establishment of Mining Deeds that allows the transfer of ownership or interest in mining claims from one party to another. A feature of the Mining Deed is the understanding that the incoming party inherits any outstanding issues of the

previous owner and settles these issues (rehabilitation, relocation and promotion of alternative livelihood for redundant employees etc) as part of the Mining Lease transfer.

The current Government and MRD's vision is to have a proper Mine Closure guideline/policy formulated and implemented as a binding document to ensure current and future mine developers carry out effective restoration and rehabilitation works as per nature of their project upon mine closure.