THE PARLIAMENT OF THE REPUBLIC OF KENYA

KENYA NATIONAL ASSEMBLY

THE ELEVENTH PARLIAMENT-FIRST SESSION

Report on the Kenyan Parliamentary Delegation to Western Australia

September, 2013

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FOREWARD

Between 16 and 20 September 2013, it was my pleasure to lead a Kenya Parliamentary delegation consisting of 7 members of departmental Committee on Environment and Natural Resources to Western Australia. The overall objective of the delegation was to explore the Western Australia mining sector to learn their best practices in the sector in order to provide a benchmark for our nascent mining industry. To meet their objective the delegates were exposed to both theoretical discussions/ presentations and participated in field trips where they had the opportunity to meet various stakeholders in the mining sector such as mining companies, chamber of commerce, universities and individual experts. The delegates also had the opportunity to interact with key state government officials and visited large scale mining operations in Western Australia.

The Environment and Natural Resources Committee is a departmental committee established under the National Assembly Standing Orders No. 216(1). The functions and mandate of the committee are also contained under the National Assembly Standing Orders, No. 216(5), most notably, to investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations, and estimates of the assigned ministries and departments and make reports and recommendations to the House as often as possible, including recommendations on proposed legislation.

The subject matter of the departmental committee on Environment and Natural Resources are stated in the second schedule of the National Assembly Standing Orders No. 216(f) as follows: Climate Change, Environment Management and Conservation, Forestry, Water Resource Management, Wildlife, Mining and Natural Resources, Pollution and Waste Management.

The full delegation was as follows:

1. Hon. Alexander. K. Kosgey, M.P., **Leader of the Delegation**
2. Hon. Jude K. Njomo, M.P.
3. Hon. Richard Moitalel Ole Kenta, M.P.
4. Hon. (Dr.) Reginalda N. Wanyonyi, M.P.
5. Hon. James Opiyo Wandayi, M.P
6. Hon. Khatib Abdallah Mwashetani, M.P.
7. Hon. Abdullahi Mohamed, Diriye M.P.

The delegation was supported by Mr. Ahmed Hassan Odhowa, Senior Research Officer (**Delegation Secretary**).

During the five-day benchmarking study tour to Western Australia the delegates interacted and held discussions with the industry and state government experts on various topics. The delegates in general learnt about: large mines, mineral processing and governance, community benefits in mining, Australia's mining resource industry, minerals development agreements and royalties, mining regulations, innovative environmental legislations, mine rehabilitation, tenements and tiles, mining challenges and mining resource mapping. In particular the delegation was interested in learning the sector's best practices to provide a benchmark for our mining sector and to enrich our proposed mining policies and legislations.

The delegates visited and held discussion with various stakeholders in the mining sector such as Curtin University School of Mines, University of Western Australia, various state government officials, Education office of the Parliament of Western Australia, mining companies, minerals refining companies, International Mining for Development Centre as well as experts in the mining sector where informative sessions on the different topics were discussed. The delegates also had a

chance to visit the mining site of the biggest producer of Bauxite in the world and the leading mining company in mining rehabilitation- The Alcoa Company. The delegation had also the privilege to make a courtesy call to the Deputy Speaker of the Legislative Assembly of Western Australia who also represents a constituency where the biggest gold mining sites are locat Country

These activities and visits by the delegates culminated into lessons learnt/observations which will be crystallized to help the Committee to effectively oversight the mining sector in the country in order to maximize its benefits to the citizens and maintain sustainable exploitation of minera country. The Committee will also utilize the experiences from the study to enhance the draft mining policy, the draft mining Bill, Environment Management and Coordination Act and the Wil 2013 in order to enact dynamic legislations in these sectors that will mirror the best in the world.

Mr. Speaker sir,

The delegation is most grateful to the Office of the Speaker and the Clerk of the National Assembly for the necessary support and arrangements made to facilitate the delegation to travel and undertake the benchmarking study tour to Western Australia. I can confirm to you that the objective of the delegation was met in this study.

Finally, I thank my fellow delegates for their foresight and thoughtful participation in the delegation's activities and their dedication to our program throughout the visit.

On behalf of the delegation, I now present with great honour and pleasure this Report and the House to consider and adopt it.

Thank you.

Signed:

Hon. Alexander K. Kosgey, MP –**Leader of Delegation**

Vice Chairman, Departmental Committee on Environment and Natural Resources

Date:

CHAPTER 1 INTRODUCTION

This report gives an account of the Kenya Parliamentary delegation visit to Western Australia from 16 September to 20 September 2013.

1. Aims and Objectives

1.1 The overall objective of the delegation was to explore the Western Australia mining sector to learn their best practices in the sector in order to provide a benchmark for the nascent Kenya's mining industry. In particular the delegation was interested in the regulatory regime, oversight of the mining sector and how government manages the public interest with respect to environmental and community benefit issues in the mining. They were also interested to understand the policy settings and operational guidelines that encourage the development of the mining sector in this state. The delegation's specific objectives for this visit were to:

1) Understand the operation of large mines including closed mines with the aim of seeing both operation and rehabilitation process once mines are closed

2) Comprehend the mining revenue management and benefit sharing mechanisms specifically issues of royalties, mechanisms of ensuring accurate reporting of extraction by ccompanies and revenue sharing at Federal, State and Local Governmental levels

3) Identify the kind of incentives government offers to mining companies to attract and sustain the investors in the mining industry

4) Understand the state agreements and mining sector license approval processes

5) Understand the social and environmental impact and the environmental management and rehabilitation of mines processes

1.2 In addition, the delegation provided a welcome opportunity to strengthen parliament to parliament relations between the Kenyan parliament and the Parliament of the Western Australia and warm extension of support and collaboration received from the Deputy Speaker of the Western Australia Legislative Assembly Hon. Wendy Duncan, MLA during a courtesy call by the delegation. The delegation also had an opportunity to meet Kenyans in Western Australia where delegates briefed the Kenyans on the efforts the Government was making to attract investments. The programme of the delegation ended with a dinner hosted by the Kenya-Australia Chamber of Commerce where the delegates again had an opportunity to market the country's investment opportunities not only in the mining sector but also on other sectors.

2. Acknowledgement

2. 1 Before departure, the delegation greatly appreciated the engagement between the chairperson of the committee, Hon. Amina Abdalla and the Australian High Commissioner to Kenya, Mr. Geoff Tooth. They together facilitated the arrangement of the programme for the committee, issuance of visas at short notice and other logistical support the Committee required. The delegation also received informative written briefings from the Ministry of Foreign Affairs and International Trade officers prior to departure. The delegation is grateful for the assistance provided by these officials.

2.2 The delegation wishes to acknowledge the efforts of the many people who contributed to the smooth operation of the visit, particularly the Western Australia School of Mines director Prof. Steve Hall, Dr Nina Hall of Faculty of Engineering and the State Departments of Western Australia State Government officers.

2.3 The delegation appreciates the assistance provided before and during the visit by staff in the Western Australia School of Mines, particularly Dr Nina Hall for making all the necessary support and logistical arrangements and continuously being present with the delegation throughout the tour period. The Delegation is in indebted to her and appreciates her sacrifice to make the visit a success.

2.4 Finally, the delegation appreciates the individuals and departments who met with the delegation for their generosity in sharing their time, views and knowledge with the delegates. The delegation indeed appreciates them deeply.

3. Report Structure

3.1. Chapter 2 sets the background to the report; Chapter 3 discusses the meetings, activities, presentations that took place during the delegation visit to Western Australia,(The program of the Visit is in **Appendix 1)** and Chapter 4 Captures the Observations/lessons learnt by the delegates during the visit.

Chapter 2 AUSTRALIA

1. Background

1.1 Australia is a stable, culturally diverse and democratic society with one of the strongest performing economies in the world. With an estimated population of more than 22.5 million, Australia is the only nation to govern an entire continent. It is the earth's biggest island and sixth-largest country in the world in land area, about the size of mainland United States and one and a half times the size of Europe. The Australian form of government follows the British (Westminster) tradition. The Governor-General, representing the Crown, exercises the supreme executive power of the Commonwealth. In practice, the Governor-General acts on the advice of the head of the government, the Prime Minister, and other ministers. The Prime Minister leads a Cabinet of ministers, each of whom has responsibility for a different portfolio of government duties. Commonwealth ministers, including the Prime Minister, are appointed by the Governor-General on the advice of the leader of a political party or coalition which represents a majority of the House of Representatives in the federal parliament similar system operates in the states. The Governor-General takes the Prime Minister's advice on the exercise of executive power, including such matters as the timing of elections and the reshuffling of ministerial portfolios.

1.2 The 1901 Constitution of the Commonwealth of Australia sets out the powers of the Commonwealth and states. Each state has its own written constitution. The High Court of Australia and the Federal Court of Australia have the authority to interpret constitutional provisions. Under the Constitution, the legislative power of the Commonwealth is vested in the Federal Parliament. The Parliament makes laws, authorizes the Government to spend public money, scrutinizes government activities, and is a forum for debate on national issues.

1.3 Australia's economy is consistently among the strongest of advanced economies in the Organization for Economic Co-operation and Development (OECD). As at 2011, it is the world's

13th-largest economy, with a strong commitment to ongoing economic reform and global engagement that emphasizes free trade and investment[1].

2. Australia Minerals development and the Western Australia's Minerals industry

2.1 With abundant resources, skilled professionals and cutting-edge technology, Australia is a leader in the global mining industry. Australia is among the largest producers of bauxite, iron and zinc ore, nickel and gold. Australia is also a major supplier of energy, including coal, natural gas and uranium. The mining sector accounted for approximately eight per cent of the Australian economy in 2011. In the same year, minerals and energy accounted for 50 per cent of Australia's exports. The sector is expanding, driven by huge demand for raw materials from the rapidly growing economies of Asia. The scale of our resource industry has helped Australia become a world leader in the development and manufacture of mining equipment, technology and services.

Australian firms are competitive across the supply chain, including in exploration, engineering, processing, environmental management, mine safety, training, and research and development. Australia is helping resource-rich developing countries use their natural resources to reduce poverty and expand their economies through the Mining for Development Initiative. The initiative draws on Australian expertise to help countries address mining-related governance, capacity and technological challenges and to promote socially and environmentally sustainable development.

1 http://www.dfat.gov.au/aib/downloads/australia-in-brief.pdf

As part of this collaboration, Australia is building geosciences research and training capacity in four West African universities. The International Mining for Development Centre offers courses to participants from throughout Africa[2]

2. 2 Western Australia covers 33% of the land area of Australia. It has a population of 2,472,700 which is about 11% of the Population of Australia. Its population density is 1.0 person per square kilometer compared with 3.0 people for Australia. Western Australia has a population growth rate of 3.5% higher than the Australian average of 1.8%.

2.3 Western Australia's resources industry is vital to both the state's and the nation's economic development and prosperity. It is the largest contributor to the Western Australian economy, representing around 35 per cent of Gross State Product and is a key driver of economic growth in Australia. Underpinned by strong demand from Asia, in 2012 the industry was worth $97 billion and accounted for a substantial 87 per cent of the State's total merchandise exports.

2.4 Western Australia was the country's largest exporter in 2012 contributing 46 per cent ($114 billion) to Australia's total merchandise exports. In Western Australia, royalties are collected from the mining companies in exchange for extraction of the State's resources. The amount payable is calculated based on the rates outlined in the *Mining Act 1978* and regulations. Royalties collected in 2012 were a significant $5.3 billion. In 2012, minerals exploration reached $2.1 billion which accounted for 56 per cent of the nation's total mineral exploration expenditure. The top three minerals explored in 2012 were: **Iron ore** – $1 billion (51 per cent), **Gold** – $541 million (26 per cent), **Nickel** – $228 million (11 per cent) [3]

2 see http://www.dfat.gov.au/aib/downloads/australia-in-brief.pdf

3 see http://www.dfat.gov.au/aib/downloads/australia-in-brief.pdf

CHAPTER 3 SUMMARY OF THE DELEGATION'S FORMAL MEETINGS, DISCUSSION SESSIONS, PRESENTATIONS, SITE VISITS AND OTHER ISSUES

1. Arrival

1.1 The Delegation Arrived in Perth, Western Australia on 15 September 2013. On the evening of the same date the delegates were welcomed by Dr. Nina Hall of Western Australia School of Mines of the University of Curtin. This was an excellent opportunity for the delegates to meet Dr. Nina, a representative of the School who was the host and the coordinator of the delegation's programme. She briefed the delegates on the programme and events for the following days. The delegates were grateful to her for the warm welcome. Dr. Nina continued to help the delegation find their way to meeting halls and was present in every event and activity throughout the period the delegation was in Western Australia. The delegation would like to thank Dr. Nina for her efforts to make the visit successful.

2. Western Australia Government and its Mineral Resource Standing

2. 1 In the morning of 16 September, 2013 the delegates met officials of the Western Australia State Department for Development and were taken through a brief on the Western Australia Government. This brief also covered the functions of the department as a coordinating lead agency. Mr. Jan-Willem Van Staden, Principal Policy Officer, Department of State Development was at her hand to present a paper on Western Australia and its mineral resource standing. Mr. Jan-Willen stated that Australia is 6th largest Country in the world and has a population of 22,906,400 at an annual growth rate of 1.8% and a population density of 3.0 people per kilometre. Western Australia covers 33% of the land area of Australia and has a population of 2,472,700 at an annual growth rate of 3.5% and a population density of 1.0 person per square kilometre and only 11% of the population

of Australia live in Western Australia. He further added that Western Australia accounted for 16% of Australia's GDP, above its 11% share of the national population. The State contributed 28% of Australia's business investment and 46% of Australia's merchandise exports. It produced 26% of the world's iron ore and 15% of the world's production of garnet and zirconium. The State stands at the pinnacle of Australia's Mineral resources producing all of Australia's nickel; garnet and diamond; 97% of the nation's iron ore; 84% of the nation's Liquefied Natural Gas (LNG); 75% of crude oil and condensate; and 72% of the gold, 61% of alumina and 61% of ilmenite.

3. State Department Role in Mining Project Implementation

3.1 Mr. Staden Further explained the roles and the functioning of the department for State Development in relation to mining. He explained some of the roles the department plays in relation to the implementation of the mining projects.

In the lead agency framework, the department manages project approvals processes through this framework. It provides an efficient and coordinated process for responsible development which applies to major resource, infrastructure, transport, large-scale land and housing projects. Major Projects are assigned to a lead agency that works with project proponents to manage all government interactions and statutory approvals. A lead agency also provides a single entry point for proponents. Proposals within the lead agency aramework receive a level of service by the lead agency commensurate to its size, complexity or environmental, economic or social impact. He added that different coordinating mechanisms are employed by the department for the projects. These mechanisms include; case management, memoranda of understanding between agencies, inter-agency taskforces/committees and officer working groups to ensure that projects progress as expected.

3.2 Mr. Standen further explained the arduous task of coordinating and delivering significant projects and state initiative, building robust internal and external relationships and gauging projects

against economic, social and environmental considerations. The department also approves for major resources, industrial and infrastructure projects across government, negotiates and manages agreements between project proponents and the state government, promotes and attracts investment in Western Australia, advises and assists Western Australian businesses in global export activities and manages Western Australia's international offices, activities and intergovernmental relationships among other functions.

3.3 He further expounded on the facilitation and coordination roles of the state department. He explained that the department is the lead agency for state sponsored significant projects (nominated by government) and facilitates major resource, industry and infrastructure projects where the proposed investment is significant, or of strategic importance to the state. When a proponent approaches the department to facilitate their project, a project manager is nominated to work with project proponents on early stage scoping work and agreed timelines, liaise with proponents while over-seeing that the approvals process works smoothly and on time and ensure that government related issues are resolved by referring them to higher levels of authority when necessary.

3.4 Mr. Standen added that the department pursues complex projects and negotiates with project proponents on behalf of the government. The department also facilitates certain projects that have significant economic benefit and ensures project proponents meet their social and environmental obligations. The department undertakes a case by case approach to ensure that each project is assessed on its own merit for avoidance of duplications and reduce the process of the project off-take is reduced to minimum. Usually all other departments involved in the project meet at an-interagency forum to give comments and make the process of approval centralised, a memorandum of understanding is entered into at the inter-agency level to know who is responsible

for what and officer working groups are formed at the lowest implementation level to ensure the proponent is implementing the project as it has been agreed by all stakeholders

3.5 He also explained that the project approval process before the mining company is licensed is a complex and time consuming exercise. It can take six months to two years before the final licence to start the project is reached. He however explained a simplified approval process as follows:

1) Application is lodged with the Mining Registrar
2) Applicant must give notice to land owners (Pastoralists, Land owner, Local Government, Native Title Holders)
3) 35 day objection period applies. If no objection the mining registrar makes a recommendation to the minister for mines who makes the final decision to grant the licence or not If there is objection, application is determined and assessed by the warden after a hearing
4) Assessment of Applicant financial capacity
5) Cultivated landholder(Farmer) consent is sought
6) Native title Holder consent is sought
7) Reserve land referral(Forest, Conservation Parks)
8) Reserve Holder comments or concurrence
9) Recommendation(Approval*/Refusal)

*Conditions to protect the environment are always imposed together with the requirement to pay fees and spend money on exploration or mining. Forfeiture of the Tenement may occur if conditions are not followed. Forfeiture of tenements might happen if conditions are not me.

4. A Case Study of a Project implemented under the Agency framework (On-Slow Project)

4.1 Delegates were interested to know the processes for approval of the projects specifically the role of the community where mine sites are located. Mr. Standen noted that extensive community participation is carried including the social obligation of the project proponents to the community. Various negotiations take place and once agreements have been reached the proponent have to meet their social obligation to the community. To elaborate this discourse further Mr. Standen explained this point using a case of an on-going project.

4. 2 He stated that in this particular project named **On-slow,** a proponent; Chevron **Australia Pty Ltd** is constructing the Wheatstone LNG Project at the Ashburton North Strategic Industrial Area near Onslow. The project consists of an **LNG plant; Domestic gas plant**; and Port **facilities.** The project's Capital expenditure is estimated to be US$29b and is expected to employ 5,500 people in Construction phase and further 400 in operation. The first Gas Export is scheduled for 2016.

4.3 In this project the State Government negotiated with Chevron to provide new community and public infrastructure to address project impact and improve community amenity and livability. The Proponent agreed to fully fund the following project as part of its social obligation to the Community by offering the following:

1) Gas-fired power station
2) Desalination plant
3) Onslow road upgrades
4) Upgrades to existing waste water treatment plant
5) New waste water treatment facilities
6) Health services upgrade
7) Housing for government services employees
8) Land development costs

9) Expansion of school and childcare facilities

10) Emergency services expansion

The Proponent also agreed to partially fund the following social projects:

1) Airport upgrade

2) Community Development Fund

3) Town master plan improvements

4) 4 Mile Creek picnic area and playground

5) Onslow aquatic and recreational centre

6) Onslow ring road

7) Old Onslow conservation and tourism development

8) Wheatstone public visitors centre; Customer service centre, visitors centre, council chambers

9) Library

5. State Agreement and Royalties for Regions

5.1 In his second part of his presentation to the delegation Mr. Standen gave a background of State Agreements and Royalties. He said from 1960s to the 1980s; State Agreements were the preferred mechanism to facilitate resource development because they provided certainty in the (then) underdeveloped regulatory environment. Early State Agreements incorporated issues that legislation, regulation or policies did not adequately cover, such as environmental stewardship; infrastructure development; and security of tenure.

5.2 He further explained that "modern" State Agreements tend to focus on project aspects not covered by existing legislation, for example the development of railways, domestic gas, infrastructure development and local content. He added that a State Agreement is a bilateral contract between the Government and a proponent of a major resources project (for example, BHP or Rio Tinto- These

are major mining companies in Australia) and are ratified by an Act of the State Parliament. They include the rights, obligations, terms and conditions for development of the project. The Contents of a State Agreement depend on what has been negotiated and agreed between the parties to it and framework for ongoing relations and cooperation between the State and the project proponent.

5.3 Mr. Standen also introduced the topic on royalties for the regions. He explained that since 2008, the State Government set aside 25% of annual mining and onshore petroleum royalties for reinvestment into regional Western Australia. He further told the delegates that the royalties for regions program consist of three streams of funding:-

a) The Country Local Government Fund: Address local infrastructure requirements
b) The Regional Community Services Fund: Assist regional communities achieve improved access to a range of community services
c) The Regional Infrastructure and Headworks Fund: Supports large-scale, strategic regional infrastructure and headworks projects

5.4 Royalties for regions funded projects across the state focus on supporting and developing hospitals and healthcare, schools, education and training, community assets (e.g. town centres, parks and sports pavilions), community programs, infrastructure, housing, water and agriculture initiatives.

6. State Agreements and Royalties

6.1 State Agreements

6.11 The Second presentation to the delegation by the State Department addressed State Agreements and Royalties in the mining sector. Mr Peter Kiossev, the Executive Director for Policy, State department for Development expounded on the background given by Mr. Standen. He noted that State Agreements are contracts between the Government of Western Australia and project proponents. They are ratified by an Act of parliament. These agreements specify the rights,

obligations, terms and conditions for development of the project by the proponent. It establishes a framework for ongoing relations and co-operation between the State and the project proponent and is the preferred vehicle for the development of new projects and expansions.

6.12 He explained that 70-80% of the total value of production in the Western Australia resources sector occurs under State Agreement Projects. In 2012, 80% of the total value of production (A$96.9 billion), that is, A$77.5 billion came from State Agreement Projects. These agreements are not limited to the mining projects but the bulk of project under state agreements are in the mining sector. He added that State agreements provide a description of the entire project and all approvals the proponent has or will obtain for the project. It covers, Mining and processing, ports, rail, other project infrastructure(roads, power, water, airports, villages), employee accommodation, Environmental management, Summary of Approvals under *Environmental Protection Act 1986; Mining Act 1978,* local content, consents and tenure required for projects such as leases, licences among other conditions. The department for State development coordinates all the approval processes from all agencies including those of the Commonwealth of Australia.

6.13 The delegates asked him to clarify on the complexity and the perspectives of the State agreements. They were in Particular interested to know the coordination mechanism, management and the local community participation. While reacting to the delegates concerns Mr. Kiossev explained that serious negotiations that can last between 6 months to 2 years take place before approval is given to any proponent. The proponent's proposal goes through a rigorous process including acquiring all the licenses and meeting all the Commonwealth and State requirements.

6.2 Royalties

6.21 In the second part of his presentation Mr. Kiossev expounded on Mineral Royalties in Western Australia. He Noted that all onshore minerals and petroleum resources and those within

the first three nautical miles of the Australian territorial sea beyond the low water mark belong to the State and royalties for extraction and sale of these minerals are paid to the State.

6.22 He also explained to the delegates that royalties are based on clear principles such as maximization of economic growth, producer/community/ intergenerational equity, stable system of revenue stream, Simplicity to administer and transparency. He added that royalties are designed to return to the community a benchmark of 10% of the mine-head at source (i.e. the value of the resource when it is first extracted) and royalty rates apply to the value of mining production (not just volume) to meet royalty principles.

6.23 Royalty collection system on minerals, are either charged on a quantum or ad valorem basis. Quantum royalties are levied on a production basis (i.e. a flat rate royalty is charged per unit of mineral recovered) and these rates may change through an amendment to the regulations while Ad valorem royalties are levied at a percentage based on the value of the mineral for example 7.5% at crushed and screened, 5% at concentrate and 2.5% metal. Specific rates apply to low value minerals.

6.24 In his discussion with the delegates Mr. Kiossev emphasized that the royalty business is closely monitored and regulated. The mining companies must keep accurate and verifiable records of all minerals extract and submit to the government royalties due on time and as required. The Government inspector as per regulation will have full access to these information and can inspect these information on site.

6.25 He further added that The *Mining Act* provides for fines for offences relating to returns, the provision of information and access to records. He informed the delegates that if one furnishes false or misleading information or fails to lodge a royalty return on time the regulations specify a maximum penalty. In addition, a person in charge of premises, where a royalty officer believes records are kept, fails to provide reasonable facilities and assistance may face a penalty. These penalties may be imposed by a court of competent jurisdiction

6.26 Mr. Kiossev told delegates that the total value of royalties (excluding petroleum) received from State agreement projects by Western Australia State between the financial years 2010-11 & 2011-12 was $7.1 billion, or 86% of total royalties' receipts which was US$ 8.291 for that period. This further strengthened the preference of State agreements in the mining sector projects.

6.27 Mr. Kiossev while responding to delegates question on revenue sharing between the federal government and the State Government, he explained that the Federal government receives a corporate tax of 30% on profit from the mining companies and a 10% Goods and Service Tax (GST) on goods and services the companies purchase while the State Government takes the royalty payments by the companies.

7. Mining Regulation in Western Australia

7.1 Dr. Roberts Ivor, Executive Director, Mineral Title, Department of Mines and Petroleum, Presented a paper on Mining Regulations in Western Australia. Dr. Roberts in his introductory remarks told the delegates that Western Australia is the World leader in minerals and energy production and earned US$ 106 Billion from minerals and petroleum in 2011-2012. He emphasized that the magnificent achievement was reached through a well regulated industry that ensures maximization of benefits to the people of Australia in whose behalf the government acts.

7.2 He explained that the mining sector in Western Australia is regulated by the Mining *Act 1978* which establishes the framework within which activities to explore for and mine mineral resources can occur and the Mining *Regulations 1981* which sets out the administrative processes for authorizing these activities through the grant of a title. "Minerals" are defined under the *Mining Act* to include all naturally occurring substances that are obtainable from the ground by mining.

However, the *Mining Act* does not apply to petroleum products or the quarrying of limestone, gravel, shale, non-mineral sand or clay on private land. These activities are dealt with under other statutes.

7.3 Dr. Roberts Explained that generally minerals are owned by the State, regardless of whether the minerals are on private land or Crown (public) land. However, minerals (apart from gold, silver and precious metals) which are on land sold or granted by the Crown before 1 January 1899 may be owned by the private landowner. The Mining Act allows people to apply for rights to explore for and extract minerals. These rights, including prospecting licences, exploration licences, retention licences and mining leases, are known collectively as "mining tenements". Other licences that have to be obtained by proponents are infrastructure licences such a Miscellaneous Licence (for road, pipeline, power lines etc) and General Purpose Lease (tailings dam, township etc). These lincences are granted on the principles that the Titles are for all minerals and on first-come-first-served basis. Other principles that guide utilization of the licences also apply such as The **"use it or lose it" principle** -A licence or lease is forfeited if no exploration or mining takes place, in addition the transfer of mineral ownership from the State to the miner only occurs when the mineral is mined and royalties are paid. He further clarified to the delegates that these Titles apply to different areas, have different fees and have minimum cap on expenditure.

7.4 Dr. Roberts also explained to the delegates that Miners must comply with regulations that require ground turn-over (handover tenement if a miner cannot continue the mining activity), annual expenditure commitments and accurate, timely reporting of the activities of the miner.

7.5 The delegates were interested to know components of an effective mining legislation. In his response Dr. Roberts, pointed out that from the experiences of the Western Australia, a mining legislation should comprehensively address the following core issues for citizens to derive maximum benefits from the sector:-

a) **Land access**- Clearly written with understood processes for land access: Does mining legislation facilitate access to land? Does the legislation facilitate the most appropriate use of land – land used for its highest value? Does the legislation permit sequential use of land (mining construction materials before zoning land for housing)? Is the legislation strong on environmental compliance (minimum footprint and rehabilitation) and thus bypassing the need for reserves to protect the environment?

b) **Prospectivity-** Encourage the acquisition and transfer of geological knowledge: Does mining legislation facilitate geological research? Is there a requirement to report exploration on results and mineral production? Is there information to assist others? What about Drill core donation (samples and specimens), is there digital submission of results? Is there free transfer of geological knowledge to others? **Security of Tenure-** Ensure security of tenure: Does mining legislation ensure security of tenure? Is their certainty and transparency of process? Are there publicly available guidelines, timelines and transparency policies? Is ground turnover encouraged (hence no "land banking")? Are companies with good business reputations attracted to explore & mine?

7.6 Dr. Roberts encouraged the delegates to ensure **that the mining** legislation they enact be one that can attract and facilitate the responsible development of the country's natural endowment for the benefit of its people. He added that a mining legislation that is predictable, encouraging, inexpensive, outcome focused, certain, transparent, balanced, pro-competition and honest will encourage investment.

7.7 Dr. Roberts explained to the delegates that small scale miners and individual propectors are treated different from the big companies. They are normally exempted from the mining rehabilitation levy, have less reporting requirements and there are special types of permits and tenements just for individual gold prospectors that can be granted over the tenements of large mining companies

The delegation with Dr. Ivor Roberts at the Department of Mines and Petroleum (DPM) to understand the Mining regulation in Western Australia

8. Sharing some Australian experiences on Mining

8.1 Prof. Steve Hall, Director, School of Mines, Curtin University presented a paper to the delegates on the experiences of Australia in the mining sector. He told the delegates that the top six Australian export earners are Iron ore, Coal, Gold, tourism, education Services, Alumina making Australia highly dependent on the development and export of minerals for its economy. He added that the experience of Australia in the sector is among the best in the World and the School of Mines he heads has been involved in the Western Australian minerals and energy industry since its establishment in 1902. The oldest constituent part of University of Curtin, School of mines has been the foundation on which Curtin has built its reputation as one of the world's leaders in the field of minerals and energy education and research. The School has Over 2,000 students, 200 staff and an annual budget of US$54 million.

8.2 He explained to the delegates that minerals are non-renewable, it is therefore important to understand the mining lifecycle in order to ensure that once extracted maximum benefits is derived from them both for this and future generations. He explained the mining lifecycle as:-

a) Exploration- which can take 1- 10 years or more

b) Site design and construction- which can take 1-5 years

c) Operation- which can take 2- 100 years

d) Final closure and decommissioning- which can take 2- 5 years

e) Post Closure- which can take a decade to perpetuity

8.3 Prof. Steve emphasized the importance the exploration phase of the mining cycle. Exploration is a high risk venture that is capital intensive and uncertain outcome which relies on investor capital to undertake investigation – starting point often publically available data such as

Government-funded Geological Survey work, historical operations and/or artisanal workers. He added that government policies can either facilitate exploration of minerals or discourage investors depending on the investor package available such the taxation regime, security of tenure and certainty. Predictable environment will be a good incentive for investors.

8.4 Prof. Steve further told the delegates that mining should not just be equal to quarrying. It should have associated services and goods. He cited the Australian example of the mining equipment and technical services (METS) sector which comprises of more than 270 diversified or specialist companies, many privately owned. Firms for which the mining industry is the dominant or sole market are the core of the METS sector, but many supply several markets. He added that in the year 2012 mining-related sales of the sector exceeded $71 billion and employment was at least 265,000 persons. Exports were greater than $12 billion. He encouraged the development of this sector to continue to sustain the economy even when minerals are no more.

8.5 He noted that in the Australian experience, the Government avoided free carry equity but has been strict on payments of royalties and taxes as per the guidelines. He added that if the government is to decide on free carry equity, it should be clear on the purpose it will serve.

8.6 The Prof. further explained that the mining sector thrives on certainty and timeliness. Delays in approvals, customs clearance, export permits, among others all cost time and "time is money" – the sooner a mine is into production, the sooner revenue and royalties flow. He equated CSR to a widely accepted good business practice but cautioned that it should not be substitute for government. The best CSR is to pay the correct level of tax and royalties on time in the jurisdiction where the companies operate.

9. Innovative Environmental Legislation in Western Australia Mining Rehabilitation fund, bonds and a new levy

9.1 Dr. Phil Gorey, Executive Director, Environment, Department of Mines and Petroleum presented a paper to the delegation on the environmental rehabilitation fund, bond and a new levy. He noted that all mining tenements contain standard conditions requiring leases and licenses to fill in all holes on the land and to take steps to minimise damage to trees and property. Other environmental conditions specific to the tenement may be imposed, including conditions requiring environmental reporting and rehabilitation of land on the completion of mining. Rehabilitation conditions may require the applicant to lodge a bond with the Department of Mines, to cover the cost of rehabilitation if the miner becomes insolvent or for some other reason fails to complete rehabilitation of the site after mining is complete.

9.2 Dr. Phil informed the delegates that the State department ensures that the Mining Companies have a mining security in place which is in form of Unconditional Performance Bond. The Bond is an agreement between the Bank and the Government- It is claimed by the government if the mining company defaults - the Bank guarantees failure by the mining company to meet its obligation.

9.3 He explained that the advantages of this arrangement is that it is common and well understood by all parties, it has low risk of corruption and cost of the failure is borne by the Bank. He alluded to the fact that the Bond has its shortcomings in that it is very expensive to the large companies, does not cover abandoned mine site and any underestimation of the bond amount is covered by the Government.

9.4 Dr. Phil explained to the delegates that each tenement has a bond and each tenement holder will pay a levy to a general fund- Mining Rehabilitation Fund(MRF). Each levy is 1% of the estimated rehabilitation cost. The Government will give the estimated rehabilitation cost for every mine site; this cost might reduce if the mining company undertakes a continuous rehabilitation on its

own. It normally falls between US $ 4-6 million. Interest generated from MRF would be about US$ 15m per year. This money is used to continuously rehabilitate any abandoned mine site or any other mine site as the need arises. Delegates were however concerned that if this mode of rehabilitation was to be adopted, there have to exist many mining firms to generate enough revenue for the rehabilitation process.

9.5 Dr. Phil noted that the MRF is a non-refundable payment. The payment to this fund by the holder is proportional to their rehabilitation liability normally 1% of their liability. Government department does the assessment of the total rehabilitation cost. Any wrong information provided by a mining company to the Government attracts a penalty of 20% of the mistake.

9.6 Environmental protection mechanisms are in-built in Mining *Act 1978 (WA)* ("the Mining Act")-which is the principal statute governing mining in Western Australia and the Environmental *Protection Act 1986 (WA).* An adverse environmental impact of mining in any site is minimised through the approval system and good environmental legislations. Failure to meet the environmental obligation rarely occurs in Western Australia

10. Mine Site Visit and Rehabilitation 'look out'-The McCoy Alcoa Mine site-(Huntley Mine)

10.1 Alcoa's Australian operations represent the world's largest integrated bauxite mining, alumina refining, aluminium smelting and rolling system. Also operating the country's largest aluminium recycling plant, agreement allowing Alcoa to mine and refine bauxite within a defined Mineral Lease on the Darling Range extending from east of Perth to Collie. In 1994 the lease was reduced to 7,129 sq km to remove areas where bauxite mining would not occur. Alcoa does not mine in old growth forest. Alcoa's first mine, at Jarrahdale, began operations in 1963 and for 35 years, until its closure in 1998, was the only source of bauxite for Alcoa's alumina refinery at Kwinana. Alcoa currently operates two bauxite mines within its Western Australian Mineral Lease.

The Huntley mine, established in the early 1970s is located near Dwellingup and is the world's largest bauxite mine, supplying bauxite ore to the Pinjarra and Kwinana Refineries. The Willowdale mine is located east of Waroona and supplies bauxite ore to the Wagerup Refinery.[3]

10.2. To learn from the experiences of this company's world class rehabilitation excellence and observe the rehabilitation and environmental management process on-site the delegates visited both an active mine site and rehabilitated mine sites where the process was explained in depth and on-site. Mrs. Moira, education Officer, Alcoa, was in hand to explain the process employed by Alcoa in the Huntley Bauxite mining site. She explained both the rehabilitation and the environmental management processes at the Huntley mine site. She told the delegates that the rehabilitation process involves the following steps (These steps are also detailed in the company's website: (http://www.alcoa.com/australia/en/info_page/mining_rehab_process.asp)

a) Pre-Mining Surveys: pre-pining Surveys are conducted in all new mining areas, to provide information on fauna and vegetation, to map the extent of dieback disease, and to identify any significant Noongar heritage sites. If rare or protected species or significant sites are present, they are avoided or management plans are developed to minimise the impact of mining on them.

3. See **http://www.alcoa.com/australia/en/info_page/australia_overview.asp**

b) Exploration drilling: exploration drilling is undertaken to identify the specific location of ore bodies within the mine lease that are suitable for mining. Drilling starts at wide spacing (120 m) and then focuses in on identified ore bodies.

c) Mine Planning: all Mine plans take into account any significant vegetation, fauna or heritage sites identified during the pre-mining surveys as well as avoiding the spread of dieback disease. A number of mine plans are produced, including a conceptual 25 year mine plan, a ten year mine schedule and a detailed five year mine plan. The Five Year Mine Plan and the Mining and Management Program (MMP) is submitted to the Mining and Management Program Liaison Group (MMPLG) each year for Ministerial approval. The MMP summarises the major environmental management programs that will be undertaken at the mine, with emphasis on issues relevant to the next five years.

d) Salvage of marketable timber: any marketable timber within Alcoa's mine lease belongs to the State government. Before clearing, the Forest Products Commission takes any marketable timber from areas where mining is planned each year.

e) Clearing & utilisation of wood residue; once all marketable timber has been taken, all remaining timber is cleared from the areas to be mined and positioned in rows. In previous years the wood residue from clearing was burnt. Residue waste from clearing is now being utilised by external organisations for charcoal production and used as fauna habitats in the rehabilitated mine areas. This reduces the amount of wood residue burnt. Alcoa is aiming to stop burning wood residue completely by identifying markets for all of the residue material.

f) Topsoil & overburden removal: the soil profile is made up of a number of layers. The topsoil layer contains a large store of seed and nutrients that is vital to the success of the forest rehabilitation and is about 15cm thick. The overburden layer is 20-80cm of gravely sub-soil material sitting above a solid concrete-like layer called the caprock. These layers are removed separately using scrapers prior to mining.

g) Breaking of caprock: scrapers and small excavators are used to remove the remaining overburden and expose the caprock. The caprock is broken by blasting.

h) Mining Ore: once the caprock layer has been broken, the bauxite is ready to be mined. An excavator or loader is used to load the bauxite onto haul trucks for transport to the crusher. Several pits are usually mined simultaneously in order to supply the refinery with a consistent grade of ore.

i) Crushing & conveying to the refineries: the crusher is used to break the ore down to a smaller size suitable for transport along a conveyor belt to the refineries.

11. Rehabilitation of closed mines areas and roads

11.1 She told the delegates that each year, mine pits that have had the ore removed and haul roads no longer needed are rehabilitated. The government requires a mine site to be restored to at least 60% of its original status but Alcoa achieves a 100% rehabilitation of a mine site. The long term objective of Alcoa's mine rehabilitation is to establish a self-sustaining jarrah forest ecosystem, planned to enhance or maintain conservation, timber, water, recreation and other forest values.

11.2 Alcoa's rehabilitation process has been developed and improved over the past 35 years, and currently involves the following processes:

a) Landscaping: Large rocks are buried, vertical pit faces are flattened down and the pit floor is smoothed to blend the mined area into the surrounding landscape.

b) Pre-ripping: Pre-ripping breaks up the compaction of the pit floor caused by heavy rubber-tyred mining equipment. This helps water and roots to penetrate through the soil profile.

c) Soil Return: The overburden and topsoil layers are returned. Wherever possible, fresh topsoil is directly returned to landscaped areas from pits that have been recently cleared. This

maximises the topsoil seed store, which is important for maximising the number of plant species in rehabilitated areas.

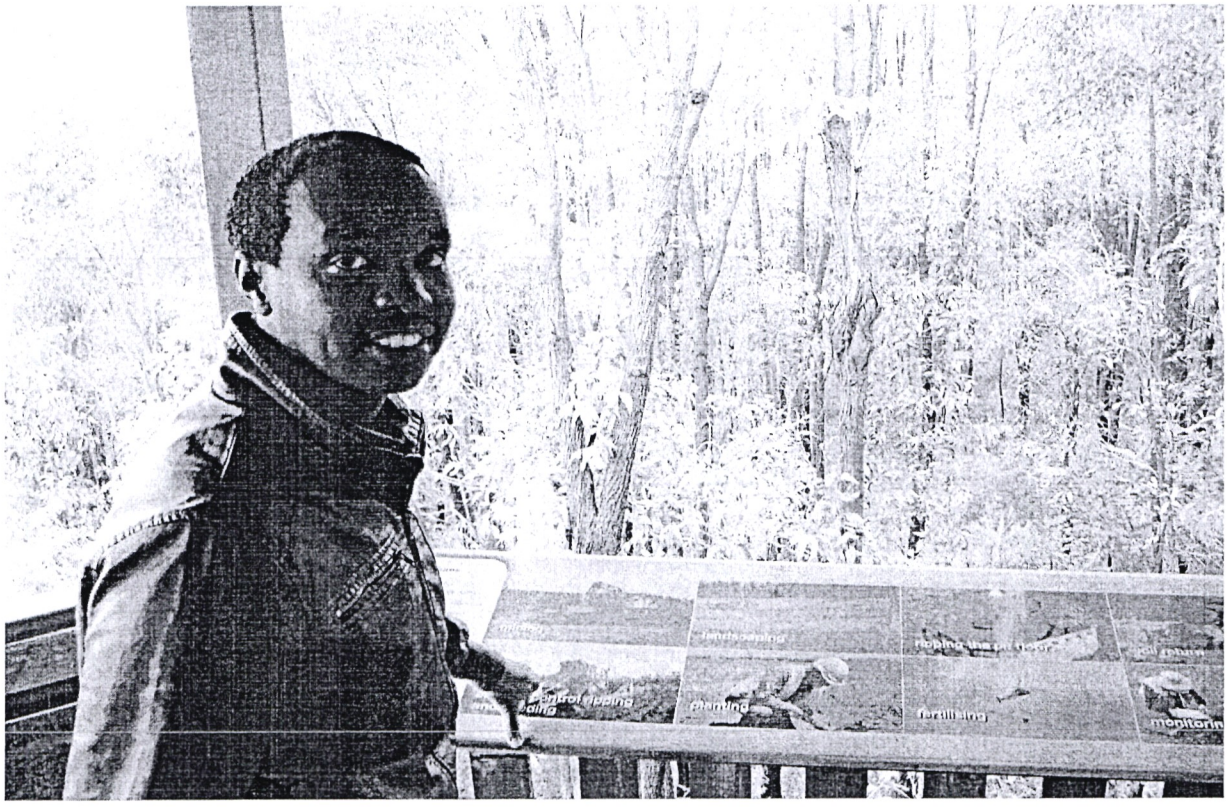
d) Final Contour Ripping & Seeding: Final surface ripping is undertaken on contour to increase the soil's water storage capacity. This contour ripping is undertaken with a multi-tine. Contour ripping creates mounds in the rehabilitation which are very important for erosion control. Attached to the dozer that performs the contour ripping is a mechanical seeding machine which spreads the rehabilitation seed mix. This seed mix has been specifically formulated by Alcoa's Marrinup Nursery and contains 50 – 80 plant species.

e) Recalcitrant Planting: Despite a large amount of research, there are some species that Alcoa is unable to establish from the seed in the topsoil or applied seed mix. These plants include many grasses and sedges that produce little viable seed. Alcoa grows plants of these species through tissue cultures (cloning) or cuttings at the Marrinup Nursery, and plants them by hand in the rehabilitated areas

f) Fertilising: To improve the establishment and early growth of trees and understory in revegetated areas, fertilizer is applied by helicopter to the newly rehabilitated areas in August each year.

g) Ongoing Monitoring & Management of Rehabilitated Areas :Every March, when the rehabilitation is 9 months old, the previous year's rehabilitation is monitored to check that the number of established plants meets targets agreed by the DEC and Alcoa, and to identify any areas which need further treatment to control weeds or repair erosion damage.At 15 months of age, the rehabilitations botanical species richness (number of different plant species) is monitored against internal and government standards.

h) Relinquishment of Mined Regions to the State: The MMPLG in consultation with the community and other stakeholders have developed a set of Completion Criteria for rehabilitation areas. Due to improvement in rehabilitation standards and techniques, two sets of completion criteria exist for pre-1988 and post – 1988 rehabilitation.



The Leader of the delegation, Hon. Kosgey, MP observing the rehabilitation process at a rehabilitated Alcoa mine site

12. An overview of Various Environmental Management Issues at Alcoa, Western Australia mining operations

12.1 In the second part of her discussion with the delegates Mrs. Moira explained the environmental management issues at the company. *The State Agreement Act* and its subsequent amendments is the legislation under which Alcoa operates today. Alcoa's operations are overseen by the Mining and Management Program Liaison Group (MMPLG), chaired by the Department of Industry and Resources on behalf of the Minister for State Development,

representatives from the Department of Water, the Water Corporation and the Department of Environment and Conservation. The MMPLG is responsible for reviewing mine plans and associated activities and making recommendations to the Minister for State Development.

12.2 All mining-related environmental issues are managed under the Environmental management System (EMS) which provides a systematic framework and process used to assist an organization in identifying and managing significant environmental impacts that may occur as a result of its activities. The EMS has five basic components: Environmental Policy, Planning, Implementation and Operation, checking and Corrective Action and Management Review.

12.3 Alcoa's Western Australia ensures continual improvement of their environmental management of their operations. Alcoa regularly works alongside universities, environmental organizations, state government departments and local government, to develop innovative methods and techniques to improve various aspects of its EMS.

12.4 In 2002, Alcoa was recognized through the WA(Western Australia) State Government's prestigious Golden Gecko Award for environmental excellence, winning its fourth Golden Gecko Award for its ongoing rehabilitation program and achieving the goal of restoring 100 per cent plant species richness to rehabilitated mine pits. In September of 2007, Alcoa won another Golden Gecko for the closure, remediation and rehabilitation of Alcoa's first bauxite mine at Jarrahdale, comprising 630 hectares of land. Alcoa continues to demonstrate its commitment to achieving environmental excellence in the management of its mining

13. Visit to Allied Minerals Laboratories (AML)

13.1 On 20 September 2013, the delegates visited the Allied Minerals and Laboratories which is an independent physical process separation facility located in Perth, Western Australia. The facility is designed to test mineral sand samples from run of mine (ROM) ore to saleable mineral products.

13.2 Mr. Gavin Diener, Director at AML, took the delegates round to see the physical separation equipment and the process the company employs. Delegates watched and learnt the physical separation and had the opportunity to participate in the exercise. Interestingly this lab handled the testing of the minerals to be mined at Kwale by the Base Titanium. Some of the minerals handles by the company include: Titanium minerals, zircon, other heavy minerals, iron ore rare earths, tantalite, and garnet.

13.3 Mr. Gavin told the delegates that the analysis techniques are tailored to ensure that resource measurement techniques align with process assessment and product marketing requirements. Attention to this detail enables the client to directly relate resource, process recovery, and marketable product volumes, without the usual translation uncertainties encountered when these project aspects are considered in isolation. He added that they have the expertise to determine the actual value of the minerals after tests have been carried out. This he said helps in determination of market value and payments of royalties.

14. Visit to Western Australia Parliament

14.1 On 17 September 2013 the Delegation visited the Western Australia Parliament. The Parliament is a two chamber House consisting of the Legislative Assembly and the Legislative Council. Other than providing an opportunity to strengthen relations between the two Assemblies

was the delegates also had an opportunity to tour both the chamber of the Legislative Assembly and the Legislative Council and learn about the history of the parliament and parliamentary buildings. The delegates benefited from a briefing from parliamentary education office on the history and the significance of the Parliament of Western Australia.

14.2 The delegates also explored practical issues regarding the operation of the Western Australia Parliament in particular the delegates were interested to know the procedure of the parliament including the weekly business, standing orders, the Order Paper and the live broadcasting of the House proceedings. The Education Office was in hand to explain all questions the delegates had and informed the delegates that the proceeding of the House is streamed live in the internet.

15. Meeting with the Deputy Speaker of the Legislative Assembly

15.1 The delegates were honoured to meet with Wendy Duncan, Deputy Speaker of the Legislative Assembly of the Parliament of Western Australia and Member for Kalgoorlie Constituency. The Delegates discussed the roles parliaments play in a democratic society. Comparisons were made between the Kenya Parliament and the Western Australia Parliament both of which have borrowed the procedure and practices from the Westminster.

15.2 The Deputy Speaker of the Legislative Assembly represents Kalgoorlie Constituency whose size is about 1000km2 and has a population of about 3000 people. The Constituency hosts site of the largest gold mine in the World. Delegates were interested to know the role of the Member of Parliament in the industry. She told the delegates that her main concern was the safety of the mines. She ensures that the companies abide by the safety regulations. She reiterated that the Government has highly trained and qualified mining inspectors who are well paid to ensure the mining companies abide by the safety regulations. This has tremendously reduced fatalities in the

mining industry and Western Australia has not had any mining related fatalities for the last two years.

15.3 She also told the delegates that the mining companies must follow stringent environmental regulation as well as pay the environmental rehabilitation levy and adhere to the Mining Closure Plan. The companies also must pay up their royalties whether they make profit or not. These royalties by the mining companies constitutes about 25% of Western Australia budget. She added that the government at times co-funds exploration drilling and conducts geological survey which is availed publically for all interested parties and investors.

15.4 She further clarified to the delegates that Parliament plays crucial role in the sector, other than enacting legislations it also ratifies Class A explorations and State Agreements. She also informed the delegates that Western Australia is still having discussions on Uranium mining because of the security risks associated with this type of minerals.

15.5 Hon. Wendy explained that the Mining industry in Western Australia pays well and was driving people away from the public service creating a challenge for the government as they try to match the package paid by the mining companies to their employees. The Deputy Speaker thanked the delegates for the visit and wished them well with the rest of their program.

Other issues

16. Dinner by Kenya- Australian Chamber of Commerce and Curtin University School of Mines

16.1 Curtin University School of Mines and the Kenya-Australia chamber of Commerce hosted a dinner for the delegation. This was an opportunity for the delegation to hold discussions in an informal setting with a number of other important players in the Mining Sector attending among them representatives from the Base Titanium and Cortex Kenya ltd. A range of issues were discussed during the dinner with Kenyan delegation recapping the lessons they had learnt for the

week they were in the country. They also appreciated the presenters of the sessions many of whom had also attended the dinner.

16.2 The mining investors present in the dinner advised the Kenyan delegation to create a conducive environment for the investors in the mining sector. They urged the delegates to enact legislation that will guide the sector and elaborately put systems in place. They have decried the high taxation regime proposed in the sector and called for review of these taxations. They said they were incensed by multiplicity of taxes such as the free carry equity interest, royalties and other taxes to be levied. This taxation regime they said was investor unfriendly especially for a country like Kenya that needs to attract investors in the mining sector

16.3 The investor also advised the delegates that the mining industry needs predictability, flexibility and security of tenure. They cited Kenya as being at the moment one of the most investor unfriendly in the mining sector in the World. They added that proper geological survey needs to be done by the government to make exploration easier for interested firms. The best way to market the mining sector investment is to let companies make profits of whatever margin from the investments, this they said will undoubtedly elicit interest and attract more mining firms to the country.

16.4 The Delegation assured the investors that proper guiding legislations will be put in place and the industry will be properly regulated and over sighted. They urged the investors to come to Kenya and seek investment opportunities in all the sectors in the country. They also asked Australian universities to open up their programmes to Kenyan students so as to help in the transfer of knowledge and skills in the mining industry.

CHAPTER 4

DELEGATES OBSERVATIONS/LESSONS LEARNT

During the five days visit the delegates observed and learnt lessons on various subjects in the mining sector. This section summarizes the delegations observation and lessons learnt under the specific subject.

Education in the Mining sector

Western Australia has one of the best and oldest universities offering cut-edged and diverse degrees in the various sections of the mining sector education. The universities release skilled professionals in every field in the mining sector and complement each other's work and research in the field i.e from *Applied Geology* to *Metallurgical Engineering*. Universities are the backbone for sector's training and research needs. Emphasis is placed on development of local skills for continuity with the understanding of the fact that dependence on expats is not sustainable. Take the case of The Curtin University, Western Australia School of mines: It has admirable reputation and respect in the field, with over 2000 students and an annual budget of US$54 million

Mining Legislations

Robust legislations aid the development, growth and regulation of the mining sector. The *Mining Act, 1978 (WA)* is the principal statute governing mining in Western Australia but this legislation is also complemented by other legislations such as the *Environmental Protection Act, 1986(WA), The State Agreement Act* and the *Mining Regulations 1981(WA)* which sets out the administrative processes for authorizing the mining activities through the grant of a title. These legislations set the necessary parameters such access to land, Licencing, royalties, taxation, environmental protection among

others for the predictability, transparency, security of tenure, and certainty the investors in the sector require.

State Government's facilitation and coordination

The State Department for Development manages project approvals processes through a 'Lead Agency Framework'. The framework provides an efficient and coordinated process for responsible development which applies to major resource, infrastructure, transport, large-scale land and housing projects. Major Projects are assigned to a Lead Agency that works with project proponents to manage all Government interactions and statutory approvals. This department also leads in facilitation for the mining resources development, marketing, facilitation and coordination to ensure efficient delivery of the sector's investment needs. The coordination is also supported by dedicated and highly skilled experts in the departments of environment, Petroleum, mines and geology.

State Agreements, public disclosure and Parliamentary approvals of major mining projects

Major mining projects are implemented through State agreements. The State enters agreement with the project proponents to implement such projects. The terms and conditions of these agreements are made public and subjected to parliamentary approval.

Licensing process

Western Australia has a determinable and stable mining licensing regime. Approval and revocation of mining lease is based on the proponent ability or inability to meet certain legal, statutory and regulatory conditions. Approval of tenements are controlled and monitored by government multi-agency framework lead by the State department for development. No one individual can decide on revocation or approval. Approval is normally based on ability to meet requirements such as environmental protection, cap on expenditure, financial capacity, timely royalty payments, and general conditions as prescribed in the mining lease. Revocation of the mining licence also e

happens through an elaborate process which is preceded by issuance of several warnings to the tenement holder his inability to meet the requirements.

Environmental assessment of Mining Lease

The Delegates observed that an application for a mining lease must be accompanied by a mining proposal to the department of Mines and Petroleum (DMP) for purposes of assessing the environmental impact of a proposal. The proposal will have information such as the a description of the site; details of consultation undertaken in relation to the proposal; technical geological and hydrological details; a description of flora and fauna on site; mining operation details including transport corridors; an environmental impact assessment; and mine closure and rehabilitation information. If a proposal is likely to have adverse environmental impact it may need to be assessed by the *Environmental protection Act, 1986(WA).* Approval for lease can only be granted when all the environmental concerns have been addressed. Further protection of the environment is also provided in that all mining tenements contain standard conditions requiring lessees and licencees to fill in all holes on the land and to take steps to minimise damage to trees and property.

Mine rehabilitation bond

Mine rehabilitation conditions may require the applicant to lodge a bond with the Department of Mines, to cover the cost of rehabilitation if the miner becomes insolvent or for some other reason fails to complete rehabilitation of the site after mining is complete. Unconditional performance bond is required to be deposited by the proponent with a reputable bank. The Bond is guaranteed by a reputable bank to cover the rehabilitation cost in case of default by the mining company.

Mining Rehabilitation Fund (MTF)

There is a pooled, government-administered mining industry fund knows as the mining rehabilitation fund. It is it is utilized by the state only when deemed necessary to rehabilitate abandoned mine sites. , Most tenement holders will be obliged to pay an annual non-refundable levy into the MRF calculated as a percentage(currently 1 percent) of their estimated total mine closure liability. Mining tenements with a closure liability estimate below a certain threshold (initially AU$20,000) will not be levied to cover the cost of rehabilitation. Tenement holders are expected to at least rehabilitate any mine site to 60% of its original status. A mine closure plan must be followed and the all mines must be managed as the per the Environmental Managements System (EMS). Tenement holders will be required to regularly submit data to the state regarding the number of hectares of land disturbed for each of its Western Australian tenements. This data will form the basis of a calculation of the tenement holder's total closure liability, which will determine the tenement holder's annual levy.

Mining royalties

Royalty collection system on minerals, are either charged on a quantum or ad valorem basis. Quantum(ex-mine value) royalties are levied on a production basis (i.e. a flat rate royalty is charged per unit of mineral recovered which is normally at 10%) and these rates may change through an amendment to the regulations while Ad valorem(value-based) royalties are levied at a percentage based on the value of the mineral for example 7.5% at crushed and screened, 5% at concentrate and 2.5% metal. Specific rates apply to low value minerals. In addition to royalties the state also receives licence fees depending on the type of licence and the extent of the lease area. Penalties will apply for failure to provide information, for the provision of false information and failure to pay the appropriate levy.

Royalty for regions

The Western Australia government has established a royalties for regions fund of US$ 600 Million to allocate money for important projects in the region and that is administered by Treasury and the department of Regional Development and Lands. As a general principle royalty revenues are allocated to projects that will continue to generate long term benefits for the community; especially capital projects rather operating or recurrent expenditures. This captures the principle of intergenerational equity and the captures the long term value of the extraction and conversion of the mineral resource for the benefit of future generations.

Revenue Sharing between governments and tax levy

The Federal government collects the corporate tax at 30% of the profit and GST for goods and Services purchased by the companies at 10%. They also collect income tax from all employees of the mining companies. The Western Australia State Government collects royalties from the mining companies. The state government also collects annual fees on mining lease, payroll tax and stamp duty on the sale of the tenement. The Local government charge rates on granted tenements. The rateable value is not based on mineral production, but is partly based on buildings on the tenement the land where mining takes place.

Incentives for Mining Investors

The delegates learnt that the State government co-funds exploration drilling and refunds up to 50% of the cost of the exploration to mining companies who win the competitive online application process. This is so for especially in unexplored areas to ensure continued prosperity of the state's resources industry. The sate was also proposing an exploration Development Incentive that will allow investors to deduct the expense of mining exploration against their taxable income. This will

provide a strong incentive for mining companies to commit capital to the exploration sector, making investment s attractive and address the severe lack of start-up capital in a competitive and difficult market especially for small and medium mining companies. The state also encourages exploration even at a small scale, ensures that ground turn over, carries out geological surveys and test drilling and publicises the results to prospective mining companies. State officials also participate in international mining exhibitions and conferences to publicise and attract prospective investors.

Proponent Social Obligations and Community benefits from mining projects

The delegates learnt that companies have social obligation and every proponent in their approval process will put forward their social obligations to the communities where mining takes place. Mining companies offer opportunities for employment to local communities in the mining area, scholarships to students, support community projects, CRS projects and other indirect benefits such as purchase of goods and services from locals, house rents from the fly in/fly out specialists. This is in addition to the royalties the companies pay to the state government.. Ensuring social benefits to the local community is the indirect benefit of mining investment in Westernn Australia

Small scale miners and individual prospectors

Small - scale miners and individual prospectors are treated different from the big companies. They are normally exempted from the mining rehabilitation levy, have less reporting requirements and there are special types of permits and tenements just for individual gold prospectors that can be granted over the tenements of large mining companies

Mine safety

The delegates observed that the companies and the Government invest heavily in the safety of the mines. There is continuous inspection by the government inspectors to adhere to mine safety

regulations. Mine site fatalities is minimised and safety measures are taken seriously. Failure to adhere to mine safety is heavily penalised by the government

Verifications of actual minerals extraction

Verification of the amount of minerals extracted is obtained from the company receipts but the government also has the ability to have independent audits carried out to have mine site inspections to verify actual minerals extracted.

APPENDICES

delegates program