# Mineral Exploration under the auspices of Exclusive Prospecting Orders (EPOs) in Zimbabwe

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### **Introduction and Historical Background**

"And Hiram sent his servants with the fleet, men who knew the sea, along with the servants of Solomon. They went to Ophir and took four hundred and twenty talents of gold (about 15 t) from there and brought it to King Solomon"

1 Kings Verse 27-28.

Ancients gold workings re-discovered by Arabs and Portuguese visitors in the 10<sup>th</sup> and 15<sup>th</sup> centuries, respectively

"These people, despite their lack of culture, yet possess a secret peculiar to themselves of discovering gold where it lies concealed in certain stones"

Francisco Baretto, 1572

### Could this be the Land of Ophir?

"...it is the local people who have found almost all of Africa's gold mines. Of four thousand mines in Zimbabwe only a handful were found by geological inference; the rest, like my father's smallworking, were discovered centuries before the white man came"

John Hollaway, All Poor Together, 2000

The modern phase of prospecting and mining triggered by Ancient working observed by 19<sup>th</sup> century European explorers such as Carl Mauch, Thomas Baines, Fredrick Selous, and Henry Hartley



- Cecil John Rhodes attracted by stories of unlimited gold deposits
- "....the Colony (Rhodesia) owes its existence as a British possession to the evidence of rich gold deposits as revealed by 'Ancients' workings and recognised as such by early hunters and explorers"

  J.W. Wiles, 1957
- On disbandment in 1890, several members of the Pioneer Column embarked on searching for the Ancients workings some of which developed into mines
- By 1894 over 65 000 claims had been pegged.
- As the mining industry grew, government realized the need for systematic mineral exploration over large areas, and for recording of information
- This resulted in the enactment of Mines and Minerals Amendment Act No. 19 of 1947, the first legislation governing the application for, and granting of Exclusive Orders (EPOs)

# Management of EPOs

- The management of the EPO system is comprehensively dealt with under **Part IV** of the Mines and Minerals Act (Chapter 21:05)
  - Almost a procedures manual complimented by the Geological Survey Guidelines (see Annals Vol. XVI, 1992)
- EPOs are issued by the President at the advice of the Mining Affairs Board
- The MAB comprises government officials, and stakeholders who include representatives of large mining houses, small scale miners, farmers, and other businesses. This ensures transparency in the issuance of the exploration titles, and resolution of disputes.
- Where can one stake an EPO?
  - Section 87 (1) of the Act reads "Any person may make written application to the Board for the making of an order in his favour over any defined area in Zimbabwe, including any area reserved...",
- Size of an EPO
  - 65 000 ha for base and precious metals
  - 130 000 ha for coal, mineral oils or natural gases
  - 2 600 ha for precious stones, other than diamonds

# Processing of EPOs

**Application Gazettal** 

		RESPONSIBILITY		
Stage	MAB Secretary/ Mining Commissioner	Geological Survey	MAB chaired by Permanent Secretary	Minister/ President
Application submission	Accepts and assigns Application Number and sends copy to ZGS.			
Application Verification		ZGS checks on area overlaps, work program, budget, company profile, minerals sought, technical expertise and expected results. Plots area on map.		
Application Noting		Recommends Applications to be	Based on available information,	

noted after above

assessment

Area is reserved. Draft General notice sent to

Attorney General for

application is noted or

rejected.

MAB Chairman

publishes checked

notice in Govt. Gazette

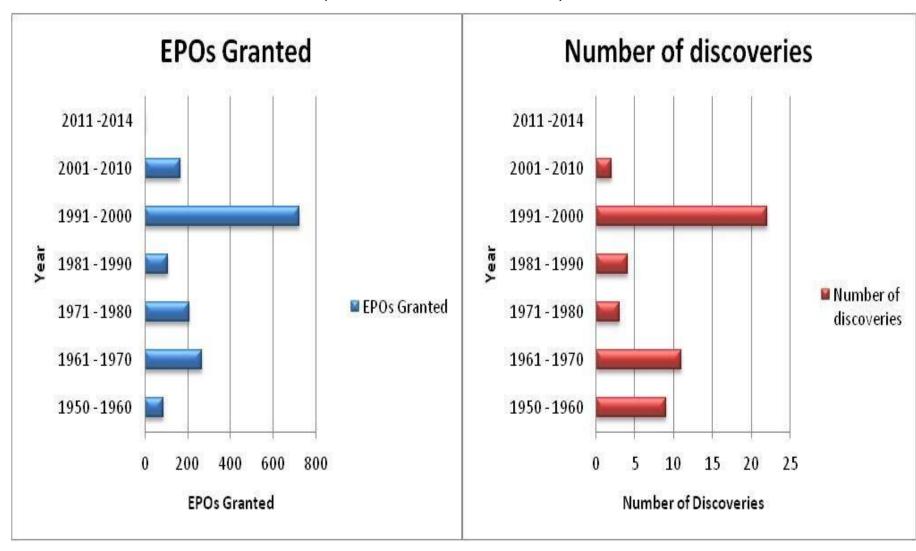
Application Consideration	Invites company to appear before MAB for interview		Interview conducted and consideration for recommendation or rejection made	
Application Recommendation and Approval [Granting]	Assigns EPO No. Prepares cabinet minute to President, supporting memo and draft General Notice of Order. Draft Notice sent to AG's Office.			General Notice to Minister and to President for Approval or Rejection.
EPO Gazettal	Approved General Notice sent for Gazettal. Approved Order sent to Applicant.	Receives Six-monthly progress reports. Sends copies to ZGS		
EPO Work Monitoring	Receives Six-monthly progress reports. Sends copies to ZGS.	Evaluates Six-monthly reports. Visits exploration sites and makes recommendations to MAB.	Accepts or rejects continuation of exploration work.	

### Some advantages of the EPO system

- Foreign capital inflows and new technologies.
- Generation of new geological information for future and public use
- Creation of employment directly and downstream for both professional and non-professionals.
- Discoveries in EPOs are often quantified, as companies are required to conform to certain international reporting standards.

- EPOs can lead to new discoveries, that maybe at depths not easily accessible
  - due to usage of latest techniques of exploration in the disciplines of geology, geochemistry, geophysics, GIS and remote sensing
- Work in EPOs occasionally result in the identification of mineral deposits suitable for exploitation by small-scale miners (see ZGS bulletins 72, 74, 82, 102, 106.
- Linkages with other industries such as equipment suppliers and service providers including drillers and assay laboratories

Historically, an upsurge in EPOs has been followed by new mineral discoveries (from Manda 2015)



### Disadvantages of the EPOs

- Closing of ground to other players as the system is exclusive
  - Not obligatory for EPO holders to release ground
- No limit to the number of EPOs a company can have at any time;
  - however, a company should demonstrate capacity to efficiently work all the ground acquired, and where necessary, to have guarantees that all the ground would be worked as per agreed plans.
- Physical Exploration in EPOs has to follow restrictions imposed by the Act where certain defined areas cannot be prospected without written consent of the holders.
- EPOs have a maximum life of 6 years, yet it may take much longer to make a discovery, and evaluate it.
  - premature pegging of claims results of exploration are claims, not quantified discovery
- Processing time not restricted can take forever
- There are no penalties for transgressions when an EPO is not revoked.
  - The current Act has only the extreme penalty of Cancellation.

### EPO success stories

1	Shawa apatite deposit
3 and 16	Silverside Copper Mine
4, 42 and 82	Mhangura and Nora copper mines
8	Manhize high grade iron ore deposits
11	Orpheus iron ore deposit
13	Lubimbi coalfield
15	Umkondo Copper Mine
19	Tuli coalfield
22, 27, 77 and 78	Copper Queen and Copper King mines
24 and 28	Buchwa Iron ore mine
35	Alaska copper mine
39	Empress nickel Mine
85	Perseverance nickel mine, Delcia gold mine
137	Shackleton Copper Mine, Avondale copper

50 and 112	Bubye Coalfield	
55,72 and 178	Trojan Nickel Mine	
57	Inyala chrome mine	
79	Chegutu Limestone deposit	
80	Shamrocke copper mine	
104 and 184	Madziwa nickel Mine	
127, 128, 130, 188, 189, 194, 203	Great Dyke Platinum-nickel-copper	
and 260	deposits	
169 and 231	Shamva-Cymric Mine	
171	Jannasch gold mine	
181 and 195	Gwaai River Copper mine	
211	Chivumburu Flintclay deposit	
50 and 112	Bubye Coalfield	
204	Inyati Copper mine (headlands)	
233 and	Shangani Nickel deposit	
352		

239	Epoch Nickel deposit
282, 279, 790, 262, 261, 985, 940, 404 etc.	Discovery of more than 150 Kimberlites
391 and 406	Die Kinkel Prospect. Zinc mineralization in the eastern portion of the Zambezi Metamorphic Belt
446	Sengwa Coal deposit (Sengwa coal mine)
486 and 729	River Ranch diamond mine
578	Kanyemba Uranium Deposit
601	Royal family gold mine
613, 427	Freda Rebecca mine
628	Expansion of golden Kopje gold mine
629	Expansion of Blanket gold mine
654	Platinum resources in the Snakes Head (Great Dyke)

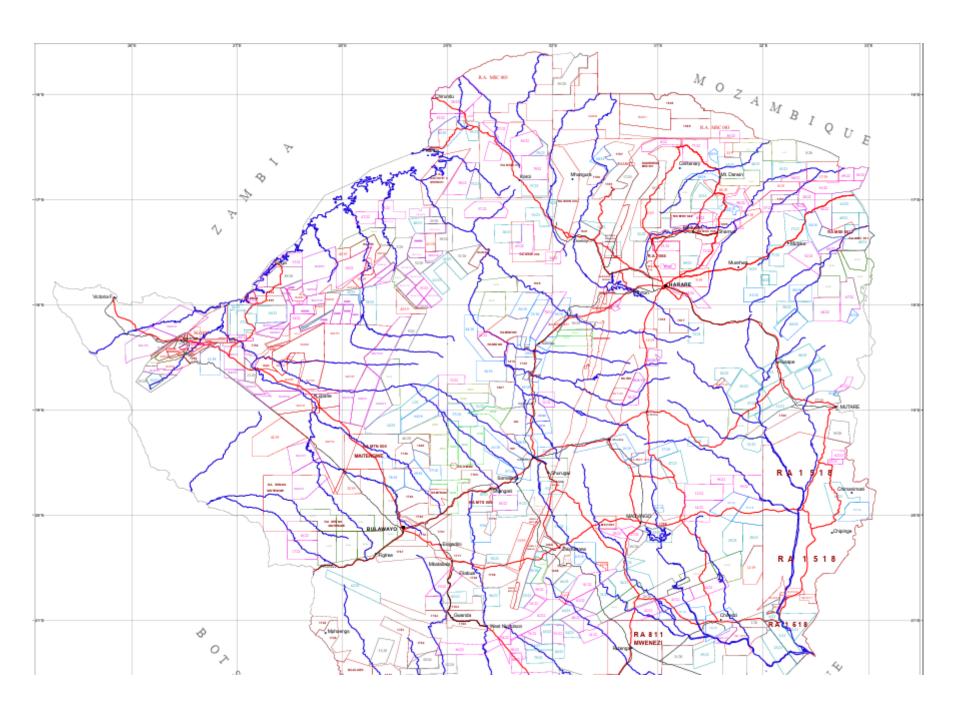
689	Considerable gold resources in the Dindi Greenstone belt were discovered.
692	Development One Step gold deposit
721	Maligreen gold mine
745	Development of Peach Tree mine
753	Ipanema and Hungwe gold discoveries
831	Discovery and establishment of the Bubi Mine Prospect
847	Renco Gold mine
995	Murowa Diamond Mine
1523	Marange Alluvial diamonds

# Recent past and current EPO situation

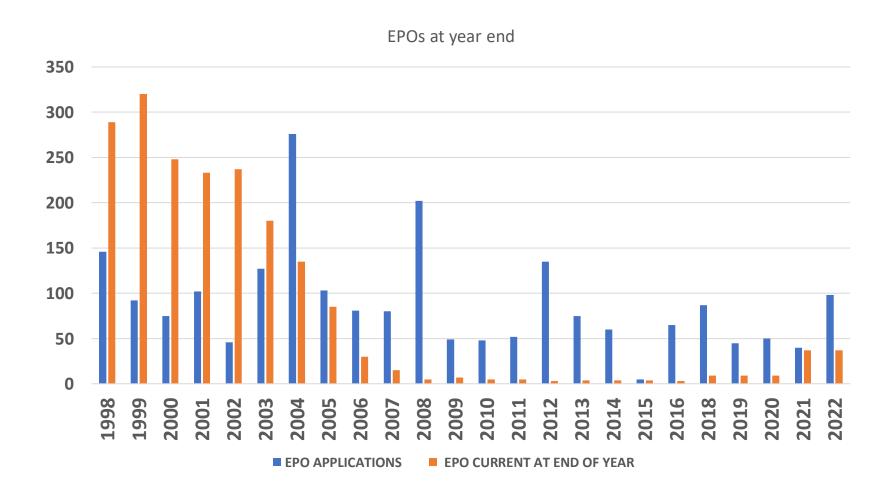
- Early 2000s, the government suspended issuance of EPOs.
  - The MAB however continued receiving new applications and to recommend issuance
- Consequently, while the EPO applicants could not carry out exploration, other parties including small-scale miners could not access the areas

### The results

- The country lagged behind in systematic mineral exploration by more than a decade
  - Exodus of mining professionals and exploration service providers to neighbouring countries and beyond.
- Small-scale miners commenced spirited campaigns against the EPO system
- Illegal mining activities increased
- Disputes, as Ministry officials began to register claims in areas applied for EPOs



• In 2018, having realised the importance of mineral exploration as the precursor to the development of the mining industry and having promised the world that Zimbabwe was open for business, the new government of the Second Republic resumed the issuance of EPOs.



## **Concluding Remarks**

### EPOs are an essential

- Attract risk foreign capital,
- Discovery of mineral deposits to replace ageing mines,
- Generation of new geological data,
- Importation of new mineral exploration knowledge and technology,
- Linkages with other sectors that provide services, and
- Employment of local professionals and non-professionals

Although the current EPO system is somewhat similar to regional and international practices

• Current management of these is inefficient as shown by the time it takes to process an EPO application from the submission of the application to the granting of the EPO.

Large tracts of land being sterilised by applications, which has resulted in some stakeholders now erroneously believing that the EPO system should be done away with.

The proposed new Act is expected to address some of these challenges

# **THANK YOU**

**Questions** 

**Answers** 

**Discussions**