

# Report

Chrome Mining Sector in Zimbabwe

2013

# ORDERED: In Terms of Standing Order No. 159

- a) At the commencement of every session, there shall be as many committees Rules to be designated according to government portfolios as the Standing and Orders Committee may deem fit.
- b) It shall be the function of such committees to examine expenditure administration and policy of government departments and other matters falling under their jurisdictions as Parliament may, by resolution determine.
- c) The members of such committees shall be appointed by the Standing Rules and Orders Committee, from one or both Houses of Parliament, and such appointments shall take into account the expressed interests or expertise of the Members and Senators and the political and gender composition of Parliament.
- d) Each Select Committee shall be known by the portfolio determined for it by the Standing Rules and Orders Committee.

# Terms of reference of Portfolio Committees - Standing Order No. 160

"Subject to these Standing Orders a Portfolio Committee shall:

- a) Consider and deal with all bills and statutory instruments or other matters which are referred to it by or under a resolution of the House or by the Speaker;
- b) Consider or deal with an appropriation or money bill or any aspect of appropriation or money bill referred to it by these Standing Orders or by under resolution of this House; and
- c) Monitor, investigate, enquire into and make recommendations relating to any aspect of the legislative programme, budget, policy or any other matter it may consider relevant to the government department falling within the category of affairs assigned to it, and may for that purpose consult and liaise with such department; and
- d) Consider or deal with all international treaties, conventions and agreements relevant to it, which are from time to time negotiated, entered into or agreed upon.

On Tuesday, 30<sup>th</sup> October 2013, the Speaker announced that the Committee on Standing Rules and Orders nominated the following members to serve on the Portfolio Committee on Mines and Energy

- 1. Hon. Chindori- Chininga
- 2. Hon. Dzingirayi Ivene
- 3. Hon. Katsande Aquilinah
- 4. Hon. Kay Iain
- 5. Hon. Makamure Ransome
- 6. Hon. Maposhere Dorcas
- 7. Hon. Mare Moses
- 8. Hon. Mudarikwa Simbaneuta
- 9. Hon. Munengami Fani
- 10. Hon. Mungofa Pearson
- 11. Hon. Munjeyi Gibson
- 12. Hon. Musvaire Washington
- 13. Hon. Muza Isheunesu
- 14. Hon. Navaya Eric
- 15. Hon. Nemadziva Naison
- 16. Hon. Shoko Heya
- 17. Hon. Marima Edmore
- 18. Hon. Mudzuri Elias
- 19. Hon. Kagurabadza Tofamangwana
- 20. Hon. Mudiwa Shuwah
- 21. Hon. Chinomona Mabel
- 22. Hon. Haritatos Peter

Hon. Chindori-Chininga E. to be Chairperson

## 1. Introduction

The portfolio Committee on Mines and Energy conducted an enquiry into the Chrome sector from the period 2011 to 2013, in accordance with Standing Order 160. Chrome mining has the potential to make meaningful contribution to the growth of the economy through revenue generation and employment creation. For the period 2009 to 2011, the sector made exports worth US\$53,6 million from an average production of about 500 000 tonnes per year. However in 2013, the sector is anticipated to experience restricted growth with an expected annual production level of only 282 000 tonnes against a maximum potential of 750 000 tonnes a year. As a result there would be low revenue inflows to Treasury as well as job losses.

The enquiry by the Committee revealed an array of challenges inhibiting the growth of this sector which include: an unevenly balanced claims structure, unfavourable prices of chrome both on the local and international markets, lack of investment into the sector, the disempowerment of mining communities, negative impact of high electricity tariffs and shortages, conflicts between farmers and miners over land, massive environmental degradation by small—scale chrome miners as well as huge unsaleable stoke piles of chrome dotted around the country following the ban of chrome exports by government in 2011.

## 2. Background Information

Chrome is an important base metal mainly used in the stainless steel industry. Currently, the product is on demand in Asia, particularly in China and Singapore. Africa has the largest ore reserves in the world and it is estimated that Zimbabwe and South Africa have more than 80% of the world's ore reserves. Chrome mining in Zimbabwe is mainly concentrated on the Great Dyke and it is estimated that the Dyke hosts about 10 billion tones of unproven reserves. Most of the chrome claims are located in Mutorashanga, Chegutu, Kadoma, Kwekwe and Lalapanzi. Despite the huge deposits of proven and unproven reserves in the ground, the country is not recognised as a significant producer on the world market, an indication that the country is failing to fully exploit this

mineral to its advantage as shown in the table below;

Country	Proven Resource	World Rank	Output (Production)	World Rank
South Africa	72.7.%	1	39.3.%	1
Zimbabwe	13.2.%	2	2.0.%	6
Kazakhstan	4.2.%	3	14.8.%	2
India	0.9.%	5	16.0.%	3
Finland	1.6.%	4	2.5.%	7
Brazil	0.8.%	6	3.3.%	8
Turkey	0.3.%	7		5
Other Countries (Oman, Iran, Turkey and Albania	7.1.%	8	22.1.%	4
Total	100%		100%	

Table 1: World Chrome Resources [Source: International Chromium Development Association (ICDA)]

Currently, the sector employs about 2 865 people and it is has the potential to employ over 7 000 people in a conducive environment.

## 3. Methodology

In an endeavour to fully understand the operations and challenges facing the chrome sector, the Committee held a number of ordinary session meetings with the key players in the industry that included: the former Permanent Secretary of Mines and Mining Development, Mr. T Musukutwa; officials from the Minerals Marketing Corporation of Zimbabwe (MMCZ), large scale chrome producers and smelters that included Zimasco, Zimalloys, Oliken and Maranatha, small-scale producers as well seven Chinese companies operating in Zimbabwe. The Committee conducted field visits and held several public hearings. The on-site visits targeted the operations of smelting companies, namely Zimasco, Oliken and Zimalloys. During the field visits the Committee had an opportunity to meet contract miners for Zimasco and Zimalloys. Three public hearings were held by

the Committee. The first two public hearing sought to get an input from mining communities of Guruve and Mapanzure on the impact of chrome activities on their lives. The third public hearing was held with small-scale miners operating in the Midlands province. During the on-site visits and public hearings the Committee had an opportunity to interact with a number of government institutions interlinked with the mining sector such as, Environmental Management Agency (EMA) and the local authorities.

# 4. Findings

These were the major findings of the enquiry:

## 4.1 National Chrome Claims - Holding Structure

The Committee was informed that there are 4 359 registered blocks of chrome. Almost 70% of these claims are in the hands of two companies, Zimasco and Zimalloys (Benscore) as shown by the chart below.

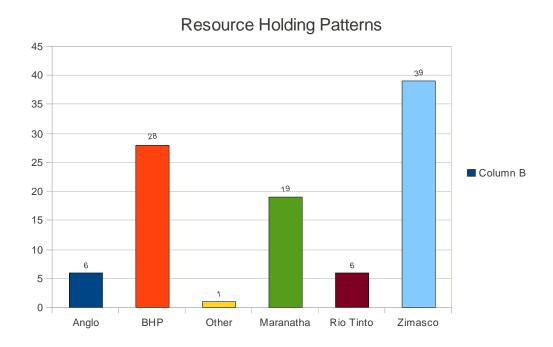


Chart 1: ·····Resource Holding Patterns in Zimbabwe

The two companies own claims which have high-grade ores with a chrome content of between 58 to 62%. The Committee observed that some of these claims were pegged as far back as 1904, a situation which has made it difficult for new entrants, especially the indigenous players to actively

participate in the sector. The Committee <u>recommends</u> that the Ministry of Mines should negotiate with these companies to release ground to enable indigenous players to acquire claims with high chrome ore content so that they can effectively participate in the sector.

Secondly, Zimalloys the second largest holder of this resource has not been operating in the last ten years and this has resulted in all its mines closing and towns such as Ceaser Mine have become ghost towns. The Committee observed that in the absence of financial investment, the prospects of Zimalloys recovering from its predicament seems bleak. Government created an opportunity for Zimalloys to raise capital through chrome exports between 2010 and 2011. However, this did not yield much result and the Committee was informed that the company requires over US\$22 million for re-capitalisation. When the Committee visited the smelting operations of Zimalloys only one small smelter was working and yet at peak period, the company had the capacity to operate seven smelters.

The Committee noted with concern that Zimalloys is holding on to an important resource which it is unable to convert to optimal use and yet on the other hand there are small-scale miners who are failing to acquire the high-grade ores to sustain and maximize their operations. At the same time there is huge demand on the world market for the mineral. The Committee observed that the root-cause lay in the Ministry of Mines and Mining which in the past 12 years has been procrastinating in amending the Mines and Minerals Act to address such challenges facing the chrome sector and the mining sector in general. For the last five years the Ministry of Mines has been planning to legalise the 'use it or lose it principle' through the amendments to the Mines and Minerals Act but this has not yet seen the light of day.

The third observation made by the Committee was that some of the claims that are in the hands of the indigenous players, are in reality owned by Chinese companies. These are being used as fronts by Chinese companies. Of the seven Chinese miners that the Committee met, only one confidently admitted that it had acquired the claims through the proper channels. MMCZ also confirmed to the Committee that one of its audits revealed that there were some locals who were being used as fronts

by Chinese to acquire claims. The Committee noted with concern that the problem was caused by government in that it was taking long to put in place a modern mining title system which would address claim ownership identities and wrangles.

# 4.2 Production Capacity of the Chrome Sector

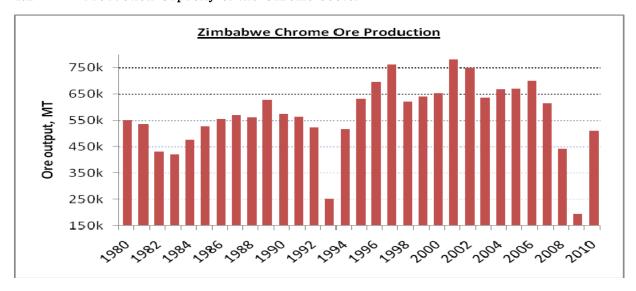


Table 2: Zimbabwe Chrome Ore Production

In the last 30 years the chrome sector has experienced highs and lows in production. The highest production levels were recorded in 1997, 2001 and 2002 when the sector produced over 750 000 tonnes per year. The lowest figures were recorded in 2009 when the country produced less than 200 000 tonnes. At the moment the future remains uncertain and it is estimated that in 2013 the country will produce about 282 000 tonnes which is below half of the sector's capacity. The Committee observed that there are several challenges affecting production of chrome which include; lack of investment to for re-capitalization, use of obsolete equipment leading to high production costs as well as high tariff and shortages of electricity. When the Committee visited Oliken smelting company, the company had no electricity because it had been disconnected due to non-payment. The company told the Committee that the electricity tariffs were too high making it difficult to sustain operations.

Other threats affecting the growth of the chrome sector include price fluctuations of chrome on the

world market. When world prices are low it adversely affects local production levels and leads to increases in production costs. The producers also complained about the mining license fees ?????? and levies which were gazetted in 2012, which they argued were too exorbitant and made operations unsustainable.

### 4.3 Financial Contribution of the Sector to the Fiscus

The Committee was informed by the Ministry of Mines that for the period 2009 to 2011, the country exported lumpy chrome, chrome fines and concentrates, worth about US53 million dollars. Chrome attracts a royalty of 2% and for the same period, Treasury received about US1 million dollars in royalties. The chrome sector is also charged a 20% levy and for the period 2009 to 2011 Treasury received, about US6,1 million dollars from the levy. The Committee noted with concern that Ministry of Mines and Ministry of Finance was not pro-active in ensuring that this levy was channeled for the development of sector particularly the small-scale miners who are in a more precarious position than the large scale producers. The levy was simply subsumed into the Revenue Consolidated Fund and was never disbursed for its intended purpose, that of developing the sector.

#### 4.4 Chrome Producers

There are two types of producers, namely small-scale and large scale.

#### 4.4.1 Large Scale Producers

Zimasco and Zimalloys mine chrome but the bulk of the ore is mined by contractors or tributary miners who work on their claims and supply the companies with the ore. The Committee had an opportunity to conduct field visits to Mutorashanga, Darwendale and Mapanzure where there are tributary or contract mining operations. The Committee observed that there were a number of challenges faced by the tributary/contractors which include:

(a) the tributors complained that the claim holders, Zimasco and Zimalloys dictated the price of the ore. There was very little room for negotiations. The tributary miners were getting prices per ton ranging from US\$55 to US\$80 against an expectation of US\$120 which made operations sustainable.

(b) the contractors were expected to rehabilitate the environment and yet they were receiving very little from the claim holder for the ore produced. In the process there was no rehabilitation of the environment that was taking place. Some of the huge open pits were excavated more than 20 years ago and were abandoned by former contractors such as JR Goddard. Currently there seems to be no plan of rehabilitating them. The Committee observed that legally the claim holder has the responsibility of rehabilitating the environment and was unjustly overburdening the contractors with this responsibility.

#### 4.4.2 Small-scale Producers

The Committee noted that the majority of the independent small scale chrome producers began operations in 2009 when government opened up a window of opportunity for miners to export chrome. When government closed that facility in 2011, there was a huge outcry from the small–scale producers that they had been deprived of an opportunity to actively participate in the chrome sector. The Committee had an opportunity to analyse the predicament of both government and the small–scale producers and came out with the following observations:

- (a) government allowed chrome exports for an 18 month period to enable companies such as Zimalloys to raise finances to re-capitalise its operations. At the same time the agreement between small-scale producers and government was that exports would be permitted on condition that the miners would raise capital to put up smelters hence promote value addition and create more employment in the country.
- (b) it emerged during the Committee's meetings that none of the small-scale or large scaleproducers had any plan to set up a smelter. This was in breach of the agreement. It was clearthat all that the producers wanted was government to extent the period for exports indefinitely.
- (c) while producers had made substantial profits, the country lost a lot of revenue through the export of chrome ore because of the lack of value of addition.
- (d) due to the huge profit margins made from exports when compared with selling to the local smelter, there was a rush to mine chrome on the Great Dyke without following proper mining procedures leading to sterilization of mining ground and serious environmental degradation.
- (e) it would be very expensive for each small-scale producer to put up a smelter and hence there was need for collective effort by all the small-scale producers to set up joint smelters but

unfortunately the miners were not well co-ordinated and this would be difficult to achieve.

- (f) government is cognizant of the challenges posed by electricity shortages and the impact it will have on establishing smelters which need to operate on an uninterrupted supply of electricity in order to achieve maximum productivity. At the same time government is also aware that local smelters only have a capacity to consume 53% of the total ore mined due to capacity constraints, leaving out a lot of ore without a market.
- (g) the local smelting plants can only process lumpy chrome ore and have inadequate technology to smelt fines and concentrates. At the same time the smelters prefer to buy ore from their own contractors or tributaries. The majority of small scale miners are independent producers and it becomes difficult for them to sell their ore to the local smelters.
- (h) for the period 2009 to 2011, government through MMCZ collected a 20% levy from chrome producers totaling US\$6,1 million and this was meant to be used for the development of small-scale producers but it ended up with Treasury without achieving its intended purpose. So government was not doing enough to assist the sector.
- (I) following the ban, small-scale producers were left with no option but to sell to the local smelters who were offering an average price of US\$60 compared to average international prices of between US\$110 and US\$235 prevailing at that time. In the process, this created a standoff between the small-scale producers and the local smelters.
- (j) local smelters only accept an ore grade of 40% and above and yet most small-scale producers own chrome claims with a lower grade content which is not accepted by the smelters but has a market outside the country particularly in Asia.

### 4.5 Chinese Chrome Companies

The Committee had an opportunity to meet seven Chinese companies operating in the country. The Committee was concerned that out of the seven companies, only one company was able to confirm that it had adequate documentation legalizing its operations in the country. The rest of the companies were evasive on how they acquired legal authority to operate in the country. When the Committee made a field visit to one of the Chinese owned mines, Sanhei in Guruve, the workers complained of labour abuses, such as low pay and long working hours.

## 4.6 Mining communities

The Committee had an opportunity to conduct two public hearings with the mining communities of Mapanzure in Zvishavane and Horseshoe in Guruve to assess the impact of chrome mining on their lives. The key issues that came out of the public hearings include:

- (a) the mining companies did little in terms of real corporate social responsibility (CSR). CSR was ad hoc and was performed when a need arose in the community, like when a person is bitten by a snake or a pregnant woman is about to deliver and needs an ambulance. The communities expectations on CSR were for bigger projects such as electrifying community institutions, rehabilitating roads and provision of educational materials in schools.
- (b) the mining companies, had no respect for traditional authority, represented by the chiefs, because they began operating without consulting the chiefs without getting an insight into the cultural values and practices of the area. At one time Chief Mapanzure ordered the miners to cease operations in his area of jurisdiction because the community was not benefiting. After

negotiations, operations resumed but life of the community has not improved for the better.

- (c) there were several conflicts between the miners and farmers over land. Some of the miners were taking over fertile agricultural land to mine chrome, hence creating food insecurity within the community.
- (d) One person died from the Mapanzure community after falling into an unsecured open pit which had not been rehabilitated by Zimasco. Some of the open pits have not been rehabilitated for over 20 years. Both the Mapanzure and Guruve communities also complained that they had lost a lot of cattle which had fallen into the open pits and grazing land was slowing depleting as the miners continue to acquire more land for their operations.
- (e) the community had a desire to be empowered through ownership of chrome claims, however they had inadequate information on how they could acquire these claims. At the same time the mining companies were not willing to release ground to these communities.

#### 4.7 Government Institutions

The Committee had the opportunity to interact with four government institutions that play a key

role in the chrome mining sector, which include: the Ministry of Mines, EMA, MMCZ and local authorities. These were the observations of the Committee:

(a) there was a lack of communication between government institutions on the miners that were operating or intended to operate on the ground. For instance, the local authorities complained

that it was difficult to get information from the Ministry of Mines on miners that operated or intended to operate in their areas of jurisdiction. EMA also faced a similar challenge in that the companies began operating without notifying them and without doing an Environmental Impact Assessment (EIA). As a result this led to serious conflicts between farmers and the miners as well as uncontrolled environmental degradation.

- (b) the mining companies were not respecting government institutions as enshrined in the law. For instance the local authorities were struggling to get their statutory dues from these companies. At one time Runde District council had to take ZIMASCO to court to force them to pay their statutory obligations. Such a scenario hinders the development and growth of local authorities as they rely on the mining operations as a source of revenue.
- (c) EMA was in a totally hopeless situation when it came to enforcing environmental regulations by mining companies. The miners either ignored EMA's warnings or opted to pay a fine for offenses committed and thereafter continue flouting environmental regulations. This is an unsustainable situation where there is no for sterner measures and support to EMA from other government institutions such as the judiciary, the police and the Ministry of Mines to bring sanity into the chrome sector. Most mining communities are likely to be left with no heritage to pass on to the future generations because of the haphazard manner in which some of the chrome miners are operating.
- (d) The Committee was informed that Chinese companies had an attitude of being untouchable and could operate above the law. The Chinese created the impression within the community and in some government institutions that they were protected by someone in a very 'high' office in government. The Committee could not verify who this person was but the perception was real within the community. As a result EMA, the local authorities and the community were powerless to enforce or demand compliance of environmental and mining regulations.
- (e) MMCZ was not pro-active in terms of promoting the growth of the sector through the 20% levy

that was collected from the sector.

#### 4.7Smelting Companies

The Committee was informed that in 2012 there were a total of eight smelting companies with an available smelting capacity of about 370 000 tonnes against an installed capacity of about 700 000 tonnes. As a result there was an excess of about 330 000 tonnes of chrome ore which was not being processed. The situation was further worsened in 2012, when Zimasco had to shut down four of its five smelting furnaces. The Committee had an opportunity to visit three smelting companies namely, Sino-Zim, ZimAlloys and Oliken. Oliken is a wholly indigenous company but was not operational because electricity had been disconnected due to non-payment of bills. The smelting companies informed the Committee that electricity was a huge operational cost and it was important for ZESA to charge a cost effective tariff that stimulated and not killed the sector. The Committee also observed that there was need for these smelting companies to invest in modern technologies of smelting that consumed less electricity and yielded higher productivity levels, given that the country has inadequate electricity.

#### 5. Conclusion

Productivity in the chrome sector is on a serious decline and yet the sector has a huge, rich and largely untapped mineral resource which has not been of much benefit to the country. Therefore it is imperative for government and the key players in the sector to actively work together to create a conducive environment that will lure investment which would spur the growth of the independent small-scale producers, large scale producers and smelters. In the same vein, value addition of chrome is critical for the country because it will create more jobs and generate more revenue for Treasury. It is also imperative for government to amend the Mines and Minerals Act which would create a platform for the sector to address issues of monopoly over\(\frac{1}{2}\) chrome claims and for the resolution of disputes between farmers and miners through a restructured Mining Affairs Board which can effectively address contemporary issues. Last but not least it is important that the mining communities are also empowered so that they derive long term benefits from minerals mined in their vicinity.

#### 6. Recommendations

- **6.1** Mining companies like Zimalloys and Zimasco must be forced to release ground and the Ministry of Mines can use current legislation and/or if its inadequate, a Statutory Instrument (SI) can be crafted to handle the same. The problem lies with the current Mines and Minerals Act which allows for basemetal/mineral claims to be inspected by payment in perpetuity as opposed to Precious metals that cannot be continually inspected by payment but by declaration of work.
- 6.2 The current chrome mining activities are primarily artisanal and restricted to mainly open cast mining which is an environmental hazard. However such type of mining approach will only access the chrome seams to maximum shallow depths of about 20m and the site is abandoned, yet these same chrome seams persist to greater depths below the mined pits, that need conventional underground mining. The thrust is to encourage more of conventional mining that will include mine planning for underground operations and thereby exploit the chrome seams to much deeper depths and hence more production for the country. This is the reason why you will notice that when Zimasco and Zimalloys were in full production before independence, most other operations where underground mines and this phenomenon of shallow pits all over the dyke is a result of artisanal mining that targets shallow ore but sterilises ground before optimal resource exploitation.
- **6.3**Encouragement of conventional mining companies to enter chrome mining should be encouraged along with upgrading the small scale miners.
- **6.4** Investment Government should create a conducive environment that lures investment into the sector by ensuring that there are no policy inconsistencies governing the mining sector.
- 6.5 Empowerment of the locals The shareholding structure of Sino-Zim, the largest shareholder of chrome claims in the country should be addressed so that locals especially the mining communities benefit. At the same time the shareholding structure of the company, which is 73% in favour of the Chinese ownership should be re-aligned according to the indigenous laws, so that local people can actively participate and benefit from the sector.
- **6.6** Chinese operations Chinese companies should legalize their operations and respect the labour practices, and cultural values of the country.

- **6.7** Legal and policy framework The Ministry of Mines should speedily bring to Parliament the amendments to the Mines and Minerals Act so as to promote growth, transparency and accountability in the mining sector.
- **6.8** Monitoring and Surveillance The Ministry of Mines, Ministry of Home Affairs and EMA should be adequately resourced with vehicles and personnel to enforce compliance in the sector, particularly on the management and rehabilitation of the environment.
- **6.9** Corporate Social Responsibility The Ministry of Mines should create benchmarks on what should comprise of CSR and not leave it to individual companies to decide.
- **6.10** Electricity Tariff Zesa should be encouraged to charge viable tariffs that promote the growth of the mining sector but at the same safeguarding its own operations and interests.
- **6.11** Pricing system Smelting companies should offer a competitive price to small-scale producers so to stimulate growth and development of these miners.
- **6.12** Government support MMCZ should be encouraged to ensure that the levy collected from the chrome producers is used to promote the development of the chrome sector.
- **6.13** Rehabilitation of the Environment Stiffer penalties should be enacted that would determining companies from flouting environmental regulations.
- 6.14 Mining Communities they should be educated on their socio-economic rights vis-a-viz natural resources. Local Parliamentarians and civil society organizations have a responsibility of disseminating this information to the communities so that people may not continue to be exploited by mining companies.
- **6.15** Government Institutions there is need for all the key government institutions in the chrome sector to be coordinated to enforce compliance in order to minimize some of the challenges facing

the sector, such as land disputes, mining claims, failure to pay statutory dues and environmental degradation.

- 6.16 Smelting Capacity The issue of smelters is a noble one but is directly linked to provision of adequate electricity power supply. If our chrome production peaks, there will not be enough smelting capacity hence some product needs to be exported raw. Thus Government needs to make a resolution on the way forward pertaining to the incapacity of smelting companies to absorb all the chrome in the country.
- 6.17 Exports of Chrome: Instead of totally banning chrome exports there should be an export tax that discourages miners from exporting but offers an escape window in the absence of local smelting capacity. MMCZ should be allowed to export chrome for the money that it received before the ban of exports. This will enable producers to recover their money.
- **6.18** Technology: Smelting companies should be encouraged to acquire modern technology which reduces operational costs whilst yielding high production levels.