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Exploring the Preservation of Mine Dumps as Heritage: Debates in the Context of Johannesburg South Africa

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A Research Report submitted to the Faculty of Arts, University of the Witwatersrand Johannesburg in partial fulfilment of the requirements for the degree of Masters of Arts (Heritage Studies)

Johannesburg, 2013.

DECLARATION

I declare that this research report is my own unaided work. It is submitted for the degree of MA (Heritage Studies) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other University.

Judith Muindisi

---------- day of ----------, 2019

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ABSTRACT

There is no doubt that Johannesburg has a rich mining history, as it has its origins in mining that began with the discovery of gold in the late 1800s. One of the most iconic and spectacular residuals of the decades of mining is the mine dumps which have contributed to Johannesburg's skyline and are regarded as part of the very significant mining heritage. The mine dumps over recent years have been a major point of debate as they are the cause of air pollution and reportedly the cause of many respiratory diseases which plague the communities who live near them. The mine dumps are also seen as a major resource both by the heritage community and by the mining companies who are relentlessly mining them sometimes without following the proper heritage legislative procedures.

This research report investigates the debates surrounding the preservation of the Johannesburg's mine dumps as heritage and their conflicting status as an economic resources, toxic waste and heritage resource. It also investigates the diverse opinions of how the different communities often separated by geographical location and socio economic status, view what is Johannesburg's mining heritage and how it should be preserved. This research report also investigates the management of the mine dumps and mining heritage in general under the current legislation and how the heritage authorities are addressing the issue of the mine dumps being regarded both as heritage and toxic waste.

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List of Abbreviations and Acronyms

CBD	Central Business District
CEO	Chief Executive Officer
CRG	Central Rand Gold
DRD	Durban Roodepoort Deep
GIS	Geographical Information Systems
FSE	Federation for a Sustainable Environment
HIA	Heritage Impact Assessment
IBA	International Building Exhibition
NHC	National Heritage Council
NHCA	National Heritage Council Act
NHRA	National Heritage Resources Act
NMA	National Monuments Act
SAHRA	South African Heritage Resources Authority
SDP	Spatial Development Framework
PHRA	Provincial Heritage Resources Authority
PHRA-G	Provincial Heritage Resources Authority - Gauteng
PHWT	Parktown Westcliffe Heritage Trust

Chapter 1

1.1 Introduction to the Study

Johannesburg's mine dumps are disappearing under the auspices of re-mining and 'development'. In the past few years there have been moves to re-mine and re-process several mine dumps that have graced Johannesburg's skyline for nearly a century. As mining methods have improved over the decades, what was seen as mine waste has become a mining resource. Reclamation of the dumps has produced ore of high grade and is profitable; the dumps have become a more attractive option than deep level mining which is not only expensive but dangerous. By 2005, over 40% of the mine dumps had disappeared from Johannesburg's landscape (www.flickr.com/photos/grahameh). This has alarmed heritage practitioners and the relevant heritage authorities (South African Heritage Resources Au thority) some of whom baulk at the idea of Johannesburg without its historical skyline. Mine dumps are also symbols of "capitalist oppression" or relics of the miners' exploitation there are a "visible reminder of the exploitation and resistance to exploitation of migrant workers in the late 19th century and early 20th century" (ibid). The mine dumps also awaken issues of nostalgia, memory, community, culture and identity. This is particularly evident with the Ferreira mine dump, which was later known as Top Star drive-in, used in the 1960s as drive-in movie theatre and later closed down in 2006 (Ho: 2007). It is now being reclaimed and former patrons of the drive-in have raised concerns about its disappearance (ibid).

1.2 Rationale

The different claims to a single landscape makes the mine dumps an interesting focus of study where one can analyse the working or non-working of the National Heritage Resources Act 25 of 1999 (NHRA), at the same time observing the interplay of different narratives, politics, economics, the environment and communities. It shows that, the constitution of heritage is not simple and easy to apply as is conceived by many. This study also becomes important as it raises the question of whether or not it is easy to apply heritage principles where they work against powerful economic interests. Johannesburg's mine dumps seize to be just

heritage, depending on how one looks at it, they can be heritage, toxic waste or gold reserves.

Part of the point of tackling this very complex issue is to demonstrate that existing heritage legislation is unable to provide guidance where there is strong contestation and conflicting material interests. The legislation pre-supposes very clear cut categories like ‘community’ and ‘significance’, which do not always correspond with reality. In this case there are several ‘communities’ with different interests and the legislation does not provide any answers of how contestations between them should be mediated or resolved. The South African Heritage Resources Authority (SAHRA) provincial bodies (PHRA) are tasked by the National Heritage Resources Act 25 of 1999 to enforce the law and regulate the heritage industry but these bodies also shown to be weak in some respects and sometimes cannot carry out their full function.

In my view however, the fate of the mine dumps is not simply due to the inadequacies of SAHRA or the heritage legislation, but also reflects a low recognition of industrial heritage in general. Mine dumps which are industrial legacies have suffered the same sort of fate as other industrial sites such as the Richmond Steam Laundries in Johannesburg which were demolished in early 2008 by Toyota in an illegal move that many saw as a disregard for industrial heritage in this country. Toyota evidently did not believe that any penalties would follow on what was an illegal demolition. But, in fact the PHRA-G is determined to pursue the matter and Toyota has been prohibited from developing the site so far.

Clearly, there seems to be a lack of interest on the part of the mining houses in complying with heritage legislation and oversight with heritage authorities in the province and the country who seem slow to act. Illegal activities such as the re-mining of the mine dumps without proper Heritage Impact Assessments (HIA) as provided for in Section 38 of the NHRA 25 of 1999 leads us to ask what authority the Provincial Heritage Authority in Gauteng (PHRA-G) has and to what degree do they manage and enforce heritage laws. However, what is interesting is the reaction of heritage activists. In researching this topic, I became interested in the members of the Parktown, Westcliffe Heritage Trust who are registered as interested and

affected parties against the development of Top Star mine dump and who are strongly against the re-processing of the mine dumps which they claim are part of Johannesburg's identity. They rightly argue that their destruction will forever change the shape of Johannesburg's skyline and will lead to a loss of cultural significance that is associated with this mine dump as a popular drive-in cinema. This raises further questions of whose culture and narrative are they talking about and which group exactly identifies with the mine dumps and understands them as part of the core of Johannesburg's identity?

Another interesting facet to this issue has been how Radio 702 Talk Show has taken on the debate of the re-mining of Top Star. The Jenny Crwys-Williams Talk Show has fed off the renewed public interest on the re-mining of the dumps and has opened a public forum of debate on a program that was dedicated to discussing the recent mining developments of Top Star mine dump. Most people who have responded have expressed their dismay about the re-mining of the dumps and have openly expressed some of their nostalgic reminiscences' about the Top Star drive-in.

1.3 Aim and Research Questions

Since the mine dumps constitute part of a landscape in heritage terms we should ask what constitutes a landscape or more specifically a cultural landscape drawing from recent literature. What underlying issues of identity, community and culture are at play in the case of the Top Star controversy? Secondly, what are the problems that are encountered in attempting to grade the mine dumps and mining landscapes as provincial/ national heritage or in other categories of heritage as defined by the South African legislation? Thirdly, questions will be raised about whose heritage it is and to which 'community' will it be speaking to. How do different people view the mine dumps? The results of the research will point to the loopholes in the South African heritage legislation and will shed light on how heritage authorities deal with and manage the mine dumps and other similar cultural landscapes. Finally, examples from other parts of the world will be used to show how other countries have dealt with landscapes that are loaded with controversy.

1.4 Literature Review

1.4.1 Origins of Johannesburg and the Mine dumps

There are several waves of literature that explain the origins of Johannesburg and how it came into being especially relating to its mining history and the rags to riches stories of some of the founders of Johannesburg. In the earlier accounts of Johannesburg's history there was a focus on the history of prominent white men known as the Randlords and their contribution to the beginnings of the City (Shorten:1970). Charles Van Onselen (1982) then took a revisionist stand deciding to focus on the social history and class struggles of ordinary people. He showed how people at the bottom end managed to survive and even prosper in the young city (ibid). Chipkin (1993) drawing from his architectural experience focused on the expansion of Johannesburg as a town and subsequently a city by showing its grandiose buildings in and around the city (Chipkin: 1993). He illustrated well how Johannesburg could compete on the same level with other world class cities in terms of architecture (ibid). Nuttall and Mbembe (2008) revisited the themes of Van Onselen's school of thought and argued that there is more to Johannesburg than architecture and social struggle, pointing out that there is also a beautiful and artistic side of Johannesburg where culture and space interact. Beavon in the first chapter of his book, combines materials from a lot of other books to give a fascinating and comprehensive account of Johannesburg's beginnings (Beavon: 2004).

But one encounters very little secondary literature written concerning the accounts of communities that live nearby the mine dumps and especially their perceptions of the dumps. There are merely snippets from huge volumes of work on other things. Surveys that will reveal more information on the mine dumps are found in the Chamber of Mines archives however access into these archives was not granted. There is a lot of literature on the emergence of Johannesburg as a mining city and how it attracted labour from the subcontinent. This includes the works by South African historians such as Jeeves, et al (1991) which explores the lives of migrant workers in an emerging Johannesburg. There is also a sizeable literature on the formation of gold and the geological processes involved in the technical aspects in the making of the mine dumps (Viljoen et al. 1999; Mphephu 2002; Beavon 2004.)

1.4.2 The Inadequacies of the South African Heritage Legislation in relation to the Mine Dumps.

According to Hall (2005) the National Heritage Resources Act 25 of 1999 (NHRA) was a direct response to the inadequacies of the National Monuments Act of 1969 (NMA) and its inception was supposed to address those inadequacies (2005:36-41). Hall (2005) traces the history of heritage legislation and gives reasons for some of the limitations and loopholes in the NHRA. He traces the making of the Act and the rushed way in which the Bill was passed into law with the result that mistakes now bedevil the Act up to today. This view however is different from Madiba's who sees the NHRA as, 'a holistic system of heritage resources management' (2005: 54-55). While Hall (2005) and (Reimold 2006:11-13) bemoan the inadequacies of the Act, Madiba (2005) sees the Act as having very few faults. Scheermeyer (2005: 121-123) from a different perspective sees it more as defining the role of the heritage bodies in this case South African Heritage Resources Authority (SAHRA) and Provincial Heritage Resources Authorities (PHRA) to enforce what is in the legislation and to make sure that there is an interconnectedness between the bodies and communities that have a stake in the landscapes or sites in question (ibid).

Worth (1998) discusses the lack of recognition of industrial heritage and attributed it to lack of understanding of such sites and of the cultural significance that may be tied to them and obviously the shortcomings of the legislation that is supposed to govern heritage resources (Worth: 1998). Reimold, (2006:11-13) agrees with this analysis, but not only highlights the shortcomings of the NHRA in the recognition of some heritage, but specifically in the recognition of industrial and geological sites as heritage resources. He goes on to mention how the resources that have been declared as national or provincial heritage resources are considered to be cultural resources and little is said about their geological importance. The NHRA does not recognise geological heritage and this is made painfully clear in the article by the author. The discussion by Reimold (2006) and Worth (1998) of industrial and geological heritage is interesting as the mine dumps probably exhibit characteristics of both industrial and geological heritage; and are beset by the same problems, which are principally the narrowness of the definitions of 'significance' and a widespread belief (as in the Toyota case) that no action will be taken if industrial

sites (read ‘ugly’, of no ‘cultural’ value, apparently without ‘cultural’ merit) are destroyed.

1.4.3 Mine Dumps as Heritage

There are various definitions of cultural landscape (which is part of heritage). The one I will use has been propounded by Graham, et al (2000:13) where ‘a landscape is an ordered assemblage of objects which acts as a signifying system in which a social system is communicated, reproduced, experienced and explored. A cultural landscape is a signifier of the culture of those who made them.' It is important to note that landscape represents value that is invested in heritage. In urban cultures powerful groups will attempt to determine the limits of meaning for everyone else by universalizing their own cultural truths through traditions, texts monuments and pictures (ibid). The impact of politics is worth exploring in the assessment of the meaning and organisation of declaring the mine dumps as heritage. Whose heritage is it? In other words, does the call from a dominant social group that has secured a degree of popular consent make it more significant? Does it command popular or more broad based support and if so why? Does it tap into memories that cut across race and class?

The case of the mine dumps is slightly different from that of the Richmond laundries in that the mine dumps are toxic and may still be dangerous. Hardersty (2001:19-28) explores the various concerns and problems of either banishing toxic waste as waste and the problems associated with trying to preserve it as heritage. He investigates the issues of preservation of the toxic waste versus the economic value and environmental degradation that can be caused. The author makes the point that if the toxic waste is preserved then there should be a socially redeeming value to it (Hardersty 2001: 19-28). I have embarked, to a certain extent, on a search for the communities in the vicinity of dumps. What memories are invoked for them? This research clearly shows that there are no simple answers to these questions.

1.4.4. Interpretations of Cultural Landscapes

Ranger, (1999: 229-263) explores the complex nature of the landscape of the Matopo Hills in Zimbabwe showing how the same landscapes can mean different things to different people. His book looks at the meanings of the landscape for the

Shona, Ndebele and the colonial Rhodesians respectively and how the Matopos has changed meanings over time (ibid). It is interesting to draw from this example as the author also looks at the interplay of politics in the management and interpretation of the cultural landscapes. McGregor (2003: 717-737) has the same line of argument, examining the Victoria Falls landscape and showing how it has assumed different meanings and interpretations. Different groups continually try to rewrite the memory of a landscape as part of the contest for resources and tourist revenue in particular. She also demonstrates how the most expressive and colourful history of the Victoria Falls was appropriated by colonial, historical and day today tourist operators in the process marginalising other groups claiming a much closer link to the Falls (ibid).

Smith (2006) argues that heritage does more than simply construct or represent a range of identities and memories. The values that inform any sense of identity or underlying memory are also used to construct ways of understanding and making the present meaningful (ibid: 75). She further argues that heritage, in its material form, becomes a cultural tool that nations, communities individual and societies use to express, facilitate and construct a sense of place, identity and belonging. Landscapes are therefore not only symbolic to many people but also shape and structure social encounters (ibid). These ideas of the layering of memory and identity will be explored in relation to the mine dumps in their various guises and associations they evoke as a work place, as waste, as a resource, as central to Johannesburg's identity and many other different facets. It will be interesting to see if the mine dumps have also assumed the role of a space that is being used to construct an identity and for participants to flex their muscles.

1.4.5 Memory and Nostalgia

The whole concept of identity is rooted in memory and what the site in question conjures up when one thinks of it. Coombes (2004) cites theories related to memory, especially nostalgia and she questions it asking if indulging in nostalgia has a productive outcome or whether it causes people to act irrationally. A key aspect in this research will be to look at the memories of the mine dumps especially Top Star. As already mentioned Top Star was a popular drive-in where scores of people went to watch movies. A quick look on the internet reveals sites that are dedicated to reminiscing about the drive-in. It is difficult to assess how many people are nostalgic

about the Top Star as most of the people express their sentiments on internet sites and blogs. This section of society are mostly middle class residents of Johannesburg who even if they were not patrons of the Top Star regard themselves as people who are interested in the heritage of the country. Coombes (2004:124) discusses the dangers in idealistic nostalgia where one reproduces a utopian past. While such dangers are inherent in any recounting of the past it is also useful to realise that in most cases nostalgia, even when it based on largely the imaginary, is a powerful tool in shaping opinion. It will be explored however if such nostalgia for example for Top Star is enough to give the mine dump cultural significance.

1.4.6 Mine dumps as Toxic Waste: Environmental Considerations

I am not well qualified to assess or comment on the toxicity of the mine dumps however it is imperative to consider arguments about the toxicity of the mine dumps especially, from the point of view of the communities which live near them. The effects of toxicity of the mine dumps have been well documented with Ramalata, C.R. (1999), (Mphephu 2002:2) and (Khumalo 2004:6) among others. They cite harmful chemicals that the mine dumps dust carries such as sulphur, zinc, silica and lead which can cause diseases such as asthma, tuberculosis, silicosis (also known as white death) and cancer. The works shows how the sand blowing off the dumps raised concerns from the communities who lived nearby the mine dump. Among other things they highlight the environmental hazards that are central to the debates regarding the mine dumps as heritage. It adds force to the questions about the mine dumps status as heritage; the question of if it is heritage then whose heritage? If the communities nearby do not regard it as such can it benefit from the heritage legislation? But it also raises the questions about if the mine dumps are re-mined will communities benefit from the redevelopment or will they be left again with toxic waste to deal with?

1.4.7. Mine Dumps as Mineral Resource: Economic Considerations

Craig, (1985) makes an evaluation of the viability of the reclamation made of the mine dumps in the 1980s. He also casts light on the reclamation of mine dumps to produce uranium in the 1950s and the reasons this was considered to be necessary. Mphephu (2002:2) also gives an account of how many mine dumps were mined and the gram per tonnage that is considered to be viable. He gives us a glimpse of the

mining houses that are involved in the re-mining of the dumps and how these ventures are extremely profitable. With regard to the viability of the dumps, there is literature that suggests that the sand could be more valuable than the gold extracted. While there is little information on what else the sand could be used for, Sawers,(no date**)** provided an in-depth analysis on the possible uses of the sand when used together with various substances. The thesis concluded that the sand was waste that was a nuisance that had to be either deposited or made use of in one way or the other. Unlike Craig's (1985) thesis this looked rather like a desperate attempt to make an argument for the use of the unusable sand.

1.4.8 World Examples of Industrial Era Heritage

Goin, and Raymonds', (2000:*29-45)* article shows there is a clear example of what mining can do to the environment and communities. The community in Wyoming Valley United States of America for a long time depended on the mining of coal and the effect of the mining left culm (an ugly black residue of coal) which made artificial hills. There is no doubt that the waste had environmental hazards and little economic benefit, even if some of the coal could be re-mined. I could not help drawing a parallel from this example with the Johannesburg mine dumps. What is not similar though is that Wyoming remained a small town while Johannesburg became a 'world class' city. In Wyoming therefore there are people who can trace their direct lineage or association with the coal residue. In Johannesburg it is a little more complicated as most people who worked for the mines were migrant workers who may have returned to their homes or integrated with the rest of Johannesburg cosmopolitan society. Will they have retained their ancestral associations or completely assimilated?

Another important example is in Germany in the Ruhr area where there has been a concerted moves to turn the usage of old industrial buildings. This is important for my work as it suggests a revolutionary way of dealing with harmful materials and preserving material culture in the process. Over a period of 10 years between 1989 and 1999, 89 projects were introduced and divided into 6 different themes. The IBA International Building Exhibition (IBA) – Emscher Park Germany tried to establish a contemporary use for industrial buildings and structures which started to become overgrown by nature (Vollmer & Berke: 2006). The project included the creation of

new landscapes, the ecological re-working of the polluted river systems and creation of jobs with establishing new office spaces (ibid). The cities developed a language in which the area could be read as part of a new identification with the industrial past. People moved back and started a more nature orientated way of living with several tourist attractions and a more sustainable way of living. While it is recognised that first world examples cannot be lifted directly and used in Johannesburg it is useful to draw parallels at the same time looking at the conversion and reuse of industrial buildings in Johannesburg such as the Turbine Hall where the restoration of the building was sponsored by the owner Anglo Gold.

1.4 Methodology

1.4.1 Choice of research and the course of research

Three sites were identified for the purposes of this research, namely Top Star mine dump located near the Central Business District (CBD) next to Simmonds South way in Johannesburg, secondly communities who live near mine dumps such Meadowlands Soweto and thirdly the communities living in the informal community of Tudor Shaft West Rand Krugersdorp Mogale City. Initially interviews were done in the West Rand in the Krugersdorp area which brought up environmental issue to head this was then supplemented with the Top Star case study which brought up a different set of issues of economic viability of the dumps versus its heritage significance.

For the correlation of the mine dumps and communities living near them Geographical Information Systems (GIS) department in the City of Johannesburg was visited for aerial maps' that would locate the general area in which the mine dumps are concentrated. Google Maps were also an important source of maps. It helped give a sense of which suburbs are nearest to the mine dumps and which therefore would be more susceptible to the negative effects of the mine dumps.

1.4.2 South African Heritage Legislation

For the mine dumps to be protected as a heritage resource one has to look at the heritage legislation that is section 34 and section 38 of the National Heritage Resources Act 25 of 1999 to understand how these landscapes are protected by the Act. It was also useful in this instance to look at the other heritage legislation in the

country and evaluate how it they deal with the issue of landscapes. The White Paper on Arts and Culture and the National Heritage Council Act 11 of 1999 are some of the major policies that deal with the heritage landscapes in general. Scheermeyer (2005: 121-123) however asserts that one of the specific functions of the National Heritage Council Act is to focus on the promotion of living heritage and components such as living heritage. As mentioned earlier the inherent and obvious disregard of the National Monument Act of 1969 led to the concentration of the subsequent legislation on indigenous histories and in particular the intangible heritage leaving industrial heritage in limbo. The City of Johannesburg has however also gone through the motions of developing Spatial Development Framework (SDP: 2005) which among other things is a development framework and policy for developing and managing the cities open spaces for public access, in development of this Framework there has been no reference to the City's heritage resources in accordance with the NHRA 25 of 1999.

1.4.3 Archival Research

1.4.3.1 Court documents prepared for the Top Star Legal battle 2007 and 2009

It was also important to look at some of the documents prepared for the legal battle between Crown Gold Recoveries (1st appellant), DRD Gold (2nd appellant) and PHRA-G (respondent). The documents both had arguments for and against the provisional protection of Top Star. The protection of the mine dump led to a legal battle in which we can see the different interest coming into conflict, showing how heritage and redevelopment are not always compatible. The documents prepared by the appellants were suggesting where heritage legislation may be weak and open to abuse.

1.4.3.2 Archives

Archival research on the files of the South African Chamber of Mines where I anticipated finding the records of mining houses which would have informed me on the reasons why the dumps were abandoned in the first place and the reasons why there was such a move to reclaim them and re-mine them was not successful. Efforts to access the archives were repeatedly frustrated. Other archives that were visited are the MuseumAfrica archives for early mine photographs of mine dumps,

Historical Papers for the history of mining in Johannesburg. Newspaper articles for burning issues were sought out at the *Star* archives and Media 24 archives prints free newspapers for communities in Soweto and has been the subject of many topics related to mine dumps. The PHRA-G archives were also a rich source of information on the Top Star mine dump.

1.4.4 Interviews

Selection of the people to be interviewed was done by selecting experts or knowledgeable people from the different aspects that are covered in this research. Communities who also live near some of the mine dumps were approached to give their opinions on the mine dumps. All interviews done were oral interviews that were transcribed and are included in the Appendix. Answers given by respondents were taken on face value and are the individual's perceptions on the subject. A combination of the interviews and the research was made to bring out the complexity of regarding mine dumps as heritage.

Meadowlands Community and Tudor Shaft Communities

Semi structured interviews were also used to identify the various health issues that are associated with the mine dumps as perceived by the communities. I also tried to uncover how different age groups and people with different backgrounds were affected by the mine dumps. With the help of an informant different members of the West Rand community were approached to share their opinions about the mine dumps and how they perceive them. The sample of informants though comprehensive is not necessarily going to be representative. The following people were interviewed:

- Sylvia Barnard a young female between ages 18-30 who lives in Tudor Shaft West Rand Krugersdorp Mogale City she also works with Mariette Lieferink in conscientising the community of Tudor Shaft on the environmental dangers in their community.
- Dawn Potgieter an older female between ages 30-60 who is a co-owner of Twitchers Eden Farm in Gerhardminnebron in the West Rand.

- Godfrey Makomene a male between the ages of 30-60, a community member and a representative of 13 communities in Meadowlands seeking compensation from Central Rand Gold for re-mining old shafts in their area.
- Peter - not his real name he also refused to give surname Security Guard of Amberfield Residential Development

Sample of Questions to be asked

- How long have you lived here?
- What do the mine dumps mean to you?

Heritage Professionals

- Elsabe Brink, historian and ex PHRA-G board member at the time that Top star was declared a heritage resource.
- Herbert Prins, a renowned conservation architect chairman of Egoli Heritage Trust and is also board member of PHRA-G Built Environment Committee.

Heritage Activist

- Flo Bird is a heritage activist and member of the Parktown Westcliffe Heritage Trust she was interviewed for her experience in the heritage industry and lobbying against developers that demolish buildings without proper heritage assessments.

City of Johannesburg and PHRA-G Authorities (Informal Interviews)

- Eric Iztkin is Deputy Director of Art and Immovable Heritage Department of Arts Culture and heritage, City of Johannesburg was interviewed for information of how the city is dealing with the issue of mine dumps and other industrial and mining at risk)
- Maphata Ramphele is Deputy Director Provincial Heritage Resources Authority-Gauteng for information on how the province manages monitors its

endangered heritage. To get a sense of the steps that were followed in the re-mining of Top Star.

Samples of Questions to be asked

- How is Johannesburg being promoted?
- How successful have been the city's and PHRA-Gs policies in protecting Johannesburg's heritage
- Is all heritage treated equitably?
- How many mine dumps does Johannesburg have and what is the criterion in choosing which to protect?

Environmental Activist

- Mariette Lieferink CEO and Founder of Federation for a Sustainable Environment an environmental activist who works with many of the communities of the Tudor Shaft and tries to make them aware of the dangers of the waste they live near.

Samples of Questions to be asked

- Do you think the communities know about the effects of the waste?
- Who do you think should pay for the damage done to the environment?
- Do you think people value the mine dumps as heritage given their toxicity?

Attorney suing mining houses for the degradation to the environment (Legal Resources Centre)

- Lulama Nhlabathi, Candidate Attorney Legal Resources Centre was interviewed for her experience in handling cases where communities are suing mining houses for degradation to their environment.

Samples of Questions to be asked

- Whom are you representing?

- Who are you suing?
- What kind of compensation would you like to get?

Geologist

- Arnold Muindisi is a senior geologist with MTP Resources was interviewed for his professional expertise in mining methods and in the evaluation of mining resources in Johannesburg.

Samples of Questions to be asked

- What is the value of the mine dumps?
- Why are mine dumps now viable?
- What methods of mining were used in the past century?

1.5 Conclusion

This chapter has introduced the topic Exploring the Preservation of Mine Dumps as Heritage: Debates in the Context of Johannesburg South Africa. The chapter places the debates in context and a number of case studies have been drawn from different locations in Johannesburg to bring out the different dialogues that should be taken into consideration before mine dumps are declared as heritage. It further summarises the complexities and debates that surround this subject with regards to the heritage significance, economic and environmental issues. The chapter also reviews the literature that was used to further understand this subject, it also explored the methodology that was used uncover some of the findings of the study. The next chapter goes in detail with the background of the re-mining of Top Star mine dump which is one of the case studies looked at in this study. Subsequent chapters (3 to 5) discuss the findings of this study from different perspectives. The concluding chapter looks at the different ways in which such landscapes have been dealt with and what sort of approach is recommended for preservation of Johannesburg's mine dumps and mining landscapes.

Chapter 2 –History of Top Star Mine Dumps and the Current Controversy

2.1 Introduction

This whole chapter is dedicated to Top Star Mine Dump, a well know mine dump that evokes feelings of memory and nostalgia among people who remember it as a popular drive-in the 1960s. Now disused it is regarded as a heritage site and this site interestingly was also earmarked for re-mining by DRD Gold, the contention over this site shows clearly the controversial issue of re-mining mine dumps which have graced the Johannesburg skyline for many years and are now regarded in some circles as heritage. The background on this particular mine dumps is also useful for both Chapter 3 which looks at re-mining of old mine dumps and Chapter 5 which assesses the case of mine dumps as heritage. This chapter traces the history of the mine dump and the various stages in its lifespan as well the arguments that are used to argue its importance as a heritage site.

2.2 Location and Description of Top Star Mine Dump (3/A/13 Dump)

Top Star mine dump is situated in Selby South of Johannesburg CBD. The main roads that border the dumps are John Street runs to the South of the dump, Richard Street to the West, Loveday Street to the East and Webber Street to the North. The coordinates are of the dump 26°13`07`.48 S and 28°02`10. 94E. Top Star dump is visible from the M2 highway and covered an aerial extent of 11 hectares. The dump rose to an elevation of 59 meters from the original ground level before reclamation began (Digby Wells and Associates: Undated).

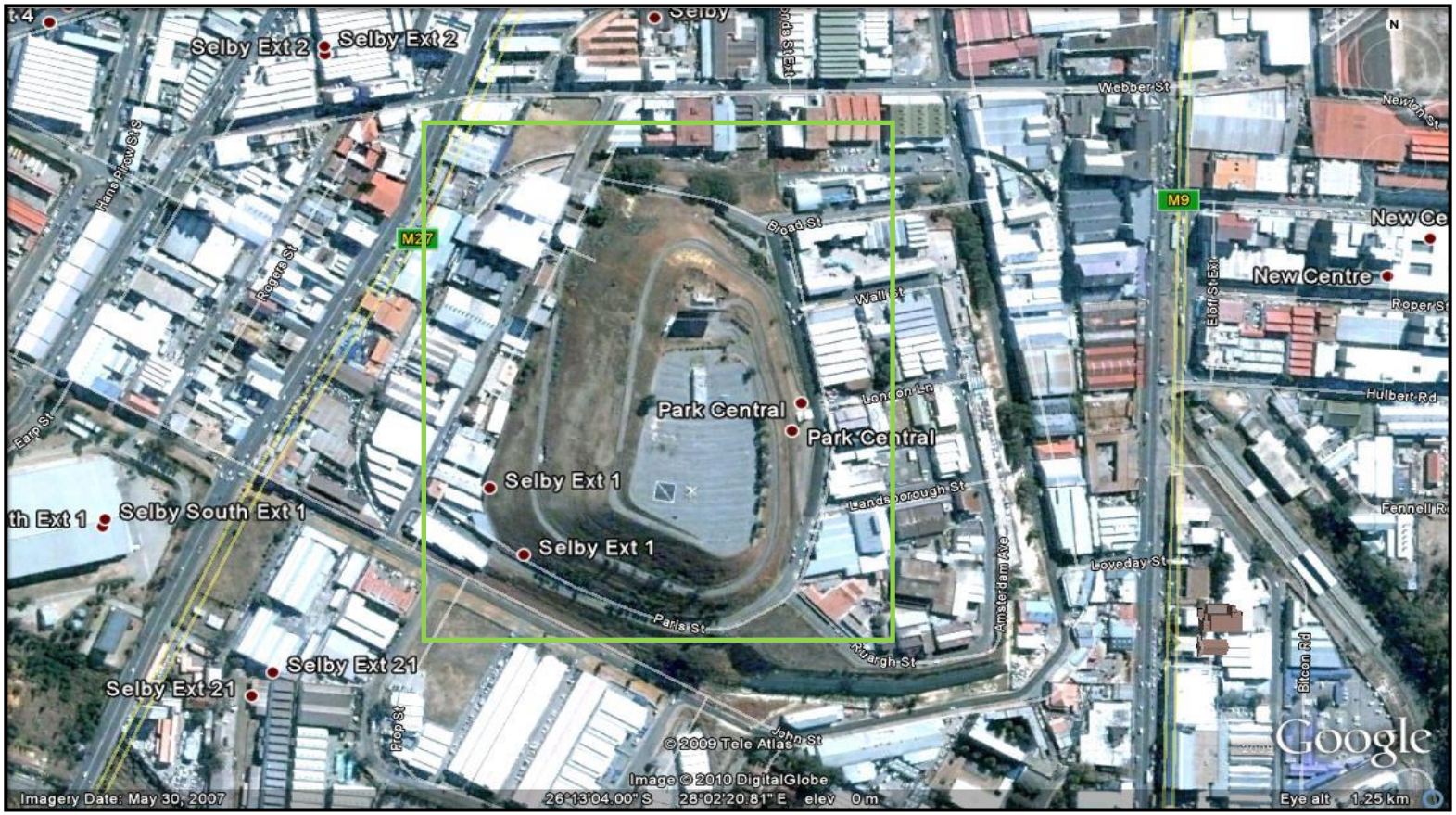

Fig 1 – Google Map showing the Aerial Map of Top Star Mine Dump and surrounding areas.
Source: Google Maps

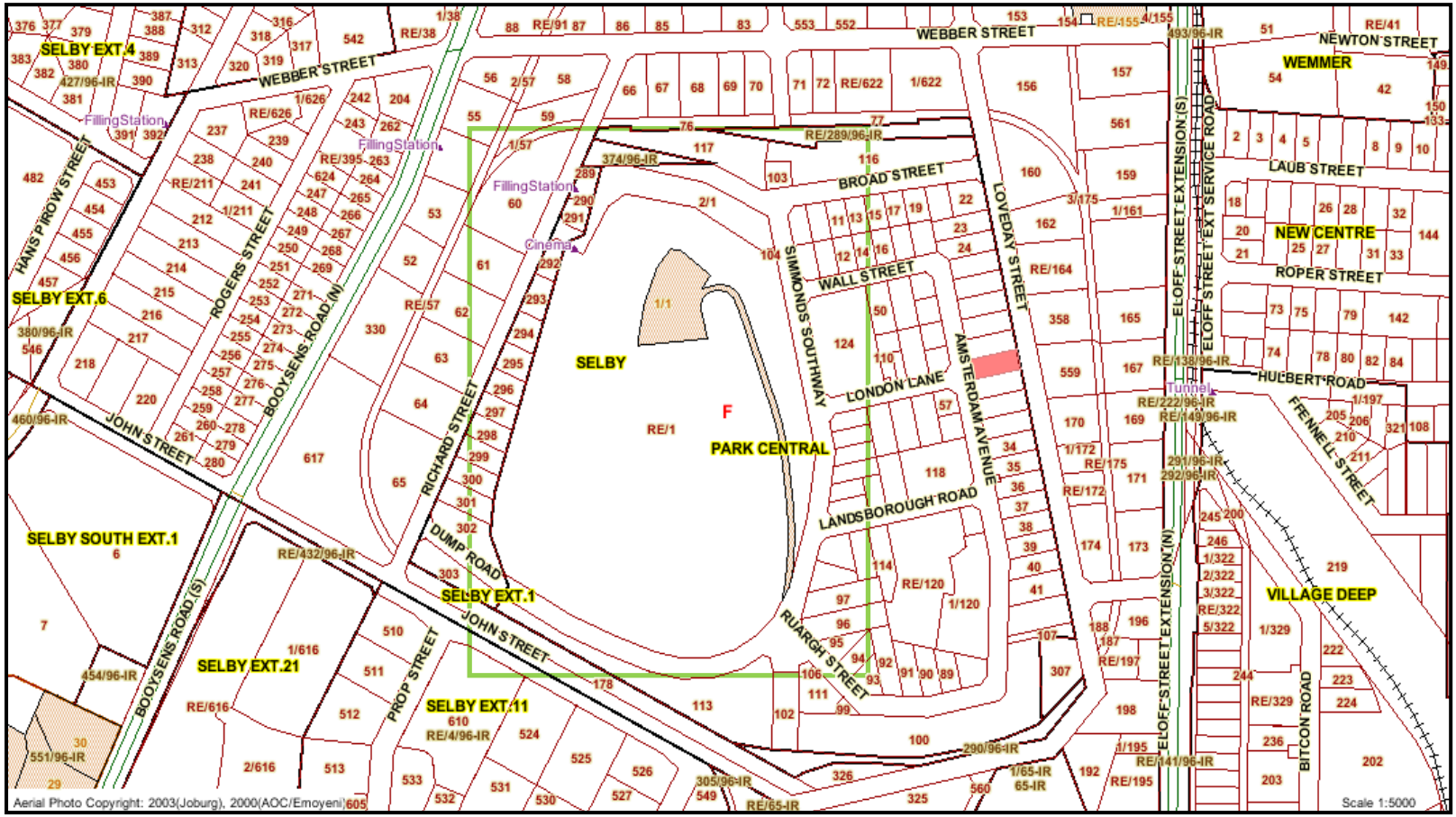

Fig 2 – Stand number Map showing the current township names of surrounding Top Star. Top Star is located in Park Central.
Source:www.joburg.co.za

The surrounding area which was the slime portion of the dump is mostly a light industrial area although there is some housing as well. The area is well developed and was declared a Township in 1952 (ibid). Although the area that surrounds it is Selby only the portion marked in green as shown by Fig 2, Top Star is located in Park Central Township. A drive-in cinema which was established in 1958 is visible from the top of many of Johannesburg's high rise buildings.



Fig 3 and 4 Entrance of Top Star Drive-In.
Source Monika Làuferts. January 2010

A large SterKinekor sign on the back of the large cinema screen of Top Star for decades has been a landmark for many people. Equally recognisable is the structure at the entrance (Fig 3 and 4) of Top Star which was designed by Rusty Bernstein the man who wrote the Freedom Charter when he worked as an architect at Wayburne and Wayburne in 1947, (www.artefacts.co.za/main/Buildings/archframes.) this suggests the intersection of different histories. The dump itself consists of fine grained sand with a powdery consistency which is the by-product of the mining operations that have taken place it is extensively covered with vegetation and succulent plants. Earlier descriptions (ibid) of the dump mention buildings but except for a few abandoned buildings near the screen no other buildings are present on site. However, the pile of bricks and building material scattered about suggest that there has been demolition taking place.

2.3 History of Top Star Mine Dump

2.3.1 Top Star Mine Dump as a Farm

There is a long history to the land that is now Top Star, going back before European occupation the area was occupied by indigenous peoples (Basotho/Tswana tribes) who had well established communities scattered in the Transvaal. This history though acknowledged is however not explored in this study. Research on the land showed that before it was developed as a mining ground 3/A/13 also known as Top Star was a farm. The ownership of the farm is complicated, as the land was divided into various portions which were later consolidated. The early history of ownership of the farm until the time it was consolidated is detailed in Table1 below.

Table 1 Early Ownership

Date of Transfer	**Transfer Number**	**From**	**To**	**Property Description**
21 January 1859	-	Government Transfer	Abraham Smit	Farm Turffontein
4 April 1865	-	Abraham Smit	Barend C. Viljoen	Ptn 'B' of farm Turffontein
4 April 1865	-	Barend C. Viljoen (Estate)	Fredrick Jacobus Bezuidenhout	Ptn 'B' of farm Turffontein
19 January 1876	495/1876	Fredrick Jacobus Bezuidenhout	F.J. Bezuidenhout and Son	Ptn 'B' of farm Turffontein
8 March 1905	1727/1905	F.J. Bezuidenhout and Son	Central Rand Freehold Pty Ltd	Ptn of Ptn B

Table 1 _Source: Fourie van der Walt Heritage Scoping Assessment May 2006

The site was originally the farm Turffontein as shown on Fig 5 which was subdivided into different portions and sold to various people who also subdivided it and sold it in different portions until the different portions were bought by Ferreira Deep Ltd (Fourie et al: 2006). The Central Rand Freehold Pty Ltd then went into a complicated process where Portion 'B' was partitioned and sold mostly to Ferreira Deep Ltd and Ferreira Gold Mining Company in 1906 (Transfer numbers 5302/1906 and 864/1906) (ibid). Ferreira Deep Ltd before its liquidation in 1929 consolidated (Certificate of Consolidated Title transfer No 13151/1929) all the portions namely Portion 'W' of 'B' and all the properties were transferred to Ferreira Estate Company Ltd in the same year (ibid: 21).

2.3.2 Top Star Mine Dump as a Mine

The farm Turffontein was proclaimed as public diggings on September 27 1886, right at the beginning of gold discovery. Numerous gold mines operated on the farm namely Robinson, Bonanza, Ferreira, Village Main Reef, Worcester Exploration and Wemmer (ibid: 22). This led to the confusion about the correct identification of which mining residue belonged to which company. It has sometimes led to the erroneous identification of Top Star mine dump as being the residue of Robinsons Deep Pty Ltd. Historical and archival maps have positively placed the mine dump on property that was once owned and mined by Ferreira Deep Mine (ibid).

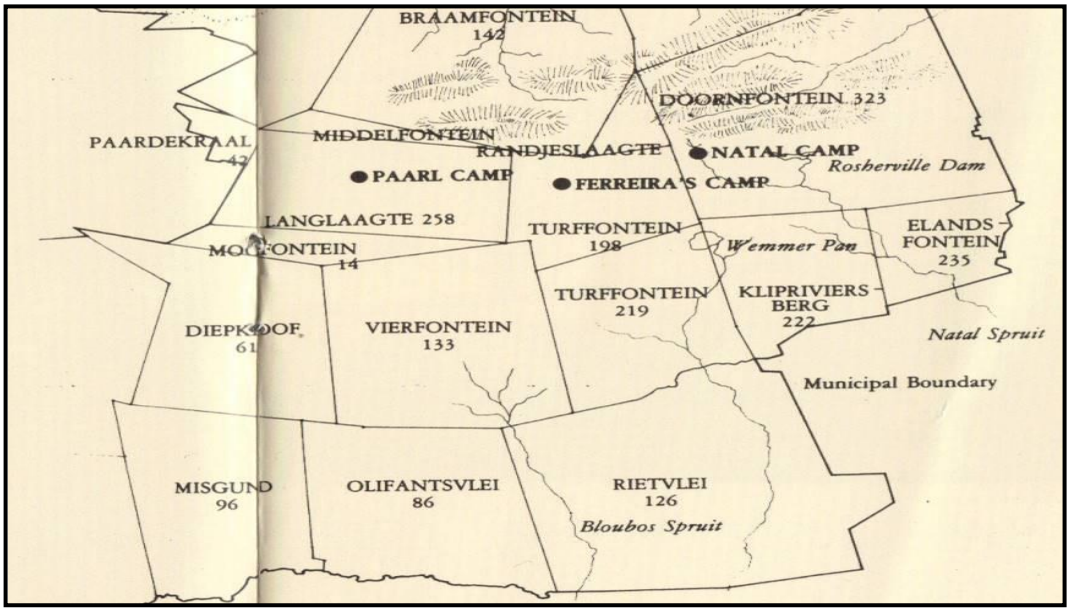

Fig 5 – Old map showing the farm portions of Johannesburg as in the 1890s,
Source: Ferreira Mine Stope, Undated. Standard Bank Booklet, Standard Bank Archives

One aspect historians and heritage activists have emphasised in lobbying for the preservation of this site is its indirect association with Ignatius P. Ferreira who is one of the earliest Rand pioneers. He was a soldier, speculator and pioneer who joined the diamond and gold rushes of the 1870s and 1880s in Kimberley. In July 1886 he camped on the farm Turffontein (Fig 5) on the Witwatersrand in Johannesburg on his way from Kimberley (Ferreira Mine Stope Standard Bank, Undated) He began prospecting for gold and other prospectors soon began joining him. The camp grew and was generally managed by him though he had no official status. He discovered gold in October 1886 and in 1887 formed a syndicate with C. Hanau, G.H Barber and F.H. Barber it was registered as the Ferreira Company (ibid). In May 1887, Ferreira Gold Company was formed. He had a short association with the mining company having sold out to his wealthier counterparts the Wernher Beit Group due to adverse circumstances soon after the formation of the gold company. Ferreira resigned from the board of directors on 3 July 1888 and he died in Kraanspoort near Louis Trichardt a comparatively poor man (ibid: 4). Although he died a poor man he is said to have run one of the best mining camps in early Johannesburg and was said to have powerful connections including being a confidant of President Kruger (Shorten 1970: 66-67).

However the mine after it had been amalgamated with other deep level mines in 1893 by H. Eckstein seemed to have flourished under the directorship of Lionel Phillips who was a close friend of Alfred Beit and Cecil John Rhodes in the 1890s (Fourie et al: 2006). Under his leadership the mine acquired 1 729 deep level claims (ibid). What is of interest however, is when the mine dump came into existence. Though the title deeds seem to suggest that the diggings that led to the accumulation of the waste began sometime in 1906, according to Fourie et al (2006:26) available information indicates that the dump was started in 1899 while work on the mine ceased during 1939, written evidence also suggests the beginnings of tailings and dump at Ferreira Deep at least during the beginning of 1900. This is all part of the ‘Randlord’ school of history and the tradition of elevating, even mythologizing, certain exceptional individuals in the rags to riches (and back to rags) mode that is used as a heritage claim.

Most people imagine the mine dumps to have been sand that was literally dug by pick and shovel from and manually made into the huge mountains of sand. The visualisation of the sweating migrant black worker shovelling the huge mounds of sand makes the preservation of mine dumps an emotive issue and this relays another layer of the heritage claim; as monument to the black mine worker. While one does not deny that the dumps are an illustration of the hard work and indeed the exploitation of black mine workers. What should also be appreciated is the technological advancement that went into mining at that time, increased outputs of gold, earned the Witwatersrand the title of the largest producer of gold in the world and led to deep level mining which resulted in the mounds of sand becoming mountains of waste sand. The mounds of sand should be seen as both products of a sophisticated technology and also stand symbolically for the enormous labour of the mine workers.

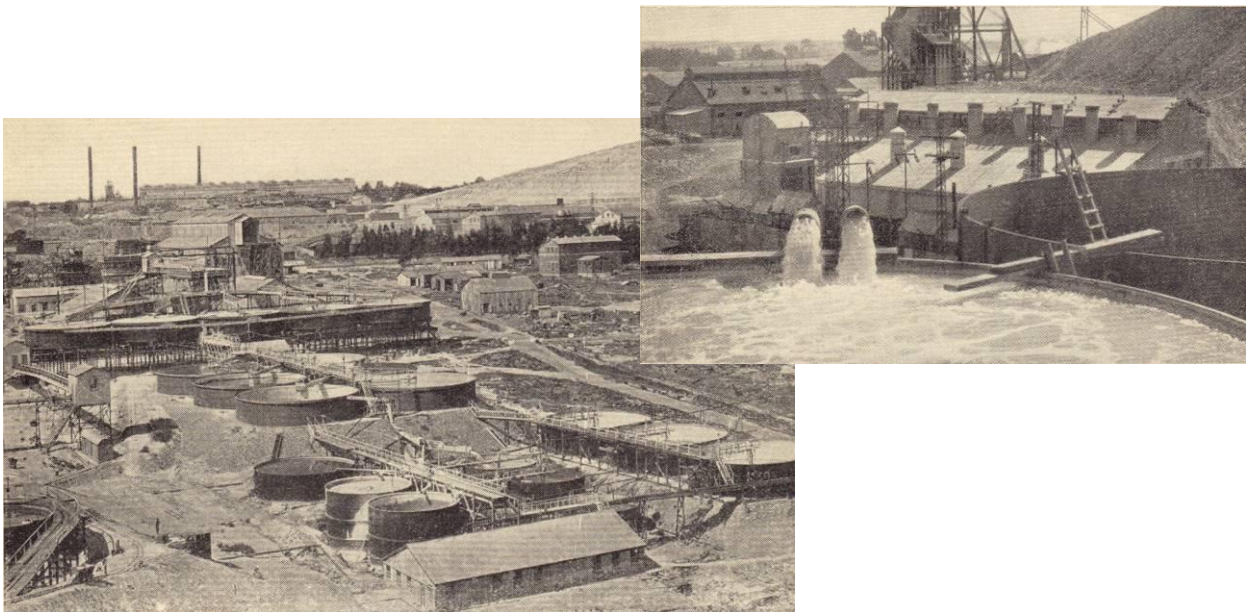

Fig 6 and 7 Showing the McArthur and Forrest process in action also known as the cyanide extraction process – Source: Unknown

Surface deposits, due to the large number of prospectors were soon exhausted and many prospectors were bought out by wealthier and bigger companies with access to capital and investors that could carry out the mining operations. However, even the larger companies were soon faced with technological difficulties as they realised that gold bearing reef drawn from below 120 feet resisted amalgamation during the

recovery process (Fourie et al 2006: 3). So unlike the gold from the surface which was freed by oxidation and weathering the gold from beneath the surface was locked in pyrite crystals (ibid). In 1890, some of the mining companies began to experiment with the MacArthur-Forrest process (patented in Glasgow, Britain) which required the gold to be dissolved in a weak solution of cyanide and then extracted with the aid of zinc metal shavings (Fig 6 and 7). The process produced impressive results and even extracted more gold from the crushed ore than other recovery processes (ibid). This process was first commercially made available at Robinson Mine which was west of the site. Besides this method there were other technological advances that were made that enabled the mining companies to mine levels sometimes deeper than 3000 metres below the ground and lately exploring methods of extracting gold from the mine mounds that have were left (ibid).

The question, however, remains whether or not mine dumps should commemorate the technological advancement which paved the way for a spectacular accumulation of wealth and gave rise to a cosmopolitan and vibrant city namely Johannesburg? Another question that can also be explored is whether mine dumps can be seen as an achievement of black workers or a symbol of their oppression? If recognised as heritage is its preservation an apt way of commemorating its significance? It should also be noted that the layering of narratives on Top Star makes it difficult to single one as the most important. One of its most important narratives is as the first drive-in cinema in the country.

2.3.3 Top Star Mine Dump as a Drive – In Movie Theatre

When the land around the mine dump was being developed into light industrial and office usage the mine dump itself was deemed to be an unredeemable piece of land and was left vacant for many decades. However efforts to establish the land as a township by Ruargh Hill Development Corporation Limited in November 1950 (who were the new registered owners after they had bought the land from Ferreira Estates Company that same year) was met with resistance. Some politicians and members of the public felt that the proposed township development would replace the old buildings on the tailings dam, the mine dump and that the Town Council would be held accountable for any such damage (Fourie et al 2006 :29). After many years and many deliberations the proposed Park Central Township was established and

published in the Government Gazette of 12 May 1955 (ibid). It was during this time the idea of converting the space began to take shape and as there was a wave of popularising cinema drive-in's around the world it was only a matter of time before Johannesburg developers caught on.

The first drive-in movie theatre in the world was established in the United States of America in 1933 when Richard Hollinghead Jr following a series of experimental attempts at throwing films on the screen rigged up a canvas screen on the roof of his machine shop, bulldozed the gravel lot into semicircles that could hold 400 cars, set up a little projector and massive speakers (Brink: 2007). The first drive-in movie was shot soon after that; *Wife Beware*. It was not long before South Africa joined in and developed its own drive-in theatre in what had become a global popular cultural practice although it was restricted only to white people.



Fig 8 and 9 Top Star Drive-In screen in its current state.
Source: Image by Monika Lauferts January 2010

Cinema drive–in owners were prohibited by the law from admitting 'non- whites' on their premises, sometimes they were also asked to employ a white only staff. At times when this was not possible and where no white people applied for jobs as ushers, 'non-whites' were employed on the condition that they avert their eyes from a white's only screen (ibid). Industrial heritage in South Africa continually seems to hold those echoes of segregation and petty apartheid as well as bearing testimony to the massive scale of cheap labour that was mostly black. Most drive–in's were operating at a loss and in the late 70s to 80s and it became a necessity to admit

people of all races so as to recoup expenditure. As the owners were prohibited from doing that by the law there were required to apply to both the Group Areas Board and the Department of Community Development for a special permit to admit other races on their premises. Usually after prolonged negotiations sometimes which took over 2 years to complete, Indians and Coloureds but not Africans were admitted into the drive-in's after they had conformed to the following conditions:

- Separate entrances for white and non-whites
- Separate cafeterias' for white and non-whites
- Separate toilet facilities for whites and non-whites
- A metre high dividing wall/fence (ibid) seating for whites and non-whites

The earliest correspondence with regards to the construction and establishment of a Top Star drive-in theatre on top of the disused mine dump was a letter written by the City of Johannesburg Licensing Department to the directors of Inrybelange Edms Bpk on the 28th of October 1958. The letter was an application for a, 'European Bioscope' which had been approved on a number of specified conditions (Fourie et al 2006:31). The set of 13 conditions were mostly with regards to the traffic regulations around the site. Preparations of the drive-in theatre began in earnest and in another letter dated 4 September 1959 was L.I. Coetze as Chairman of the Top Star drive-in cinema indicated that they intended to construct a hotel on top of the dump as well as use the angled spaces of the dump as advertising space. The approval for the cinema was given by the relevant authorities in a letter dated 2 October 1959 (ibid: 32). The drive-in was officially opened in 1958 by Inry Belleggings and from the very beginning was a hit with white Joburgers who came to enjoy the screenings twice a day Monday to Saturdays (Moshatama Undated).

The site was bought by Anglo American, Ashanti Gold and leased to SterKinekor which took over the running of the cinema. Just 12 years after the first drive-in was built the number of drive-ins in South Africa and Southern Rhodesia had risen to 280. From 1976 in South Africa the increase of broadcasts in television and the number of television sets people owned and the nationwide recession and decreased the number of drive-ins tremendously attendance had dropped from

235 650 in 1975 to 83 950 in 1979 (ibid). Most drive-in's started to close and by 2007 there were only seven drive-ins in South Africa the open spaces were being turned into housing estates and parking lots. The mine dump continued working as a cinema though in a much diminished state and was later closed in 2006 after the SterKinekor lease was terminated due to the sale of the property to DRD Gold. The decision to close down the drive-in was met with public outcry as the place had meaning and significance for the people who had patronised the previously popular drive-in at Top Star. Most of them made their displeasure known by writing in to editor's columns in newspapers and expressing their views when given the platform on radio stations such as Radio 702 on the Jenny Crwys-Williams Show.

2.3.4 Reclamation of Top Star - Recent Developments

In September 2006 AngloGold Ashanti sold the property to Durban Roodepoort Deep (DRD) Gold who then asked the main tenants who were SterKinekor to vacate the property not later than the 31st of December 2006. DRD intended to re-mine the sand as it was deemed to be profitable at that time due to the falling gold prices and the reduction of profitability of the underground mines which were getting deeper and deeper and therefore more expensive to mine (Interview Arnold Muindisi Geologist January 2010). Soon after the purchase of the land the new owners began in earnest to find a way in which they could profit from the land. They began to re-mine the dump and extract the gold as it was now possible to extract the residual gold which had been left in the dumps when the original mining of the reef occurred with the less sophisticated mining methods than the ones offered in the 21st century (ibid).

Re-mining the sand was seen as the most progressive thing to do by city planners and mining houses as it would free up valuable land which is in close proximity to the city and it would also treat the ground for future development of the area and fully utilise what others deemed as underutilized land (Fourie et al :2006). While this was all economically lucrative the enthusiasm in the early days was dampened by concerns among many of Johannesburg's citizens who felt that the mine dumps especially Top Star were a valuable heritage resource that could not be dispensed with in order to unlock its economic potential. The legal battle between the Provincial Heritage Authority–Gauteng (PHRA-G) and DRD Gold began. The culmination of

this was the provisional protection of the 'site known as the Top Star mine dump including its immediate surroundings in terms of Section 29 of the National Heritage Resources Act 25 of 1999 for a period of two years'(Notice 3540 0f 2006 in the Provinsiale Koerant 2006 No 323: 139). For the following two years 2006 – 2008 DRD Gold made an effort to get permission to mine the property but to no avail the land lay fallow for two years. When the two years lapsed the DRD Gold revived their efforts to reprocess the sand. They were not successful in getting the necessary permits from PHRA-G to continue mining and have since the beginning of 2009 began re-mining the sand despite the stop order that they were issued, to stop with all mining operations until the necessary heritage evaluations had taken place.

It remains unclear why PHRA-G having been successful in preventing DRD Gold from re-mining at Top Star for a two year period has not appealed for continuation of the ban. It is also a mystery why PHRA-G once the 2 year protection had lapsed did not re-apply for a new one since they had used the legislation in their favour the first time. There has been an outpouring of protests to the mining house both through the media and through other forums but mining of the dump has gone ahead nevertheless and has resulted in the irreparable damage to the dump and the property that surrounds it. In my view the defiance of the mining house has also damaged the reputation of PHRA-G as an effective organisation that will continue to struggle with situations such as the one that there are confronted with. As mining continues at Top Star it is interesting to discover why the mining houses have continued to mine against such criticisms and why they feel they do not have to take the caution seriously.

2.4 Conclusion

This chapter has outlined the background of Top Star mine dump and has laid the foundation that helps the reader understand arguments why the mine dump is at the centre of controversy on the re-mining debate. The history of mine dump clearly shows how some of its associations are significant and how some can be regarded as fleeting. The technological advances have no doubt made the prospect of re-mining extremely attractive but it has also brought with it questions on whose narrative should be celebrated in preservation of the mine dumps and how heritage authorities are repeatedly failing to enforce the heritage legislation. The following

chapters in this study will endeavour to explore some of these questions and debate the re-mining of mine dumps from different points of view. Chapter 3 looks at the re-mining of the dumps from a miner's perspective while Chapter 4 looks at re-mining and mining landscapes from an environmental point of view, lastly Chapter 5 examines how mine dumps (Top Star in particular) can be regarded as heritage with taking into consideration the current legislation.

Chapter 3- Re-mining Old Mine Dumps: Economic Considerations

3.1 Introduction

As seen in the last chapter the mining community has been taking on the relevant heritage authorities and trying to get a positive feedback from their own point of view that will allow them to reprocess the mine dumps without any repercussions. To many in the mining community the dumps are a mineral resource waiting re-processing and they are impatient with the view expressed by some sections of the community that the mine dumps should be kept as heritage resources. Without going into detail this chapter will explore the views of mining companies that are reprocessing the mine dumps, it will also look at the various reasons the mine dumps are now considered to be economically viable. This chapter will look at the mine dumps from the miners' point of view examine the dismissal by mining companies of the 'heritage value' arguments made by heritage activists, a dismissal that is clearly shown in the case of Top Star mine dump.

3.2 Economic Incentives for Re-mining

For more than a century South Africa has been the leading exporter of gold and most of it coming from the Witwatersrand. Over the past decades gold constituted over 50% of the South African exports and it contributed significantly to the country's exports (www.mining-technology.com/news). This has however dropped dramatically as China has now overtaken South Africa as the leading gold producer and according to the Reserve Bank Quarterly Bulletin of 2009, in the second quarter gold accounted only for 9% of the total exports (ibid). According to the Reserve Bank Governor at the time, Tito Mboweni, 'this is largely due to gold reserves in this country being depleted and what is left is more difficult to extract as mining becomes a deeper level activity and therefore too costly' (ibid).

Although gold prices have remained quite high in the last couple of years, most mining companies have been unable to capitalise on this as the gold that is still available has become very costly to extract. South Africa has some of the deepest mines in the world and this has also come at a price as most of them are becoming

more and more unsafe as deep mines cause seismic movements which lead to rock falls that often kill and maim miners. Some mining companies have abandoned the mining of gold in the Witwatersrand and have started looking elsewhere for other mineral resources. Others such as Crown Gold Recoveries Pty Ltd (CGR), a wholly owned subsidiary of DRD Gold, have turned to the reclamation of mine dumps as an alternative to mining underground.

3.3 Reclamation of Top Star

CGR has been in existence for over 20 years and has been responsible for the reclamation of 22 mine dumps in the area that surrounds the CBD of Johannesburg (2006 statistic) (Motivation document 2006:4). According to the motivation document that CGR prepared for the reclamation of Top Star the key motivation for the project was unlocking the 10 hectares for future development as the land was of high value due to its proximity to the CBD of Johannesburg. CGR claims to have unlocked land to the tune of 205ha in similar projects making available land that can be used in other developments (ibid: 2-4). The main thrust of the document outlined the various advantages that the community and how the City could benefit from if the dump was reclaimed. The advantages are listed below:

With the CGR employing over 1000 people and assuming that each person had at least 6 dependants the continuation of the company through reclamation of Top Star would mean a continued income for over 6000 people. The primary employees of CGR (National Union of Mine Workers) wrote letters in support of the reclamation and the continuation of their employment thereof.

Land use was cited as the most important motivation for the project. The document pointed out that the dump was not only located close to the CBD but was also highly accessible from the CBD as it was surrounded by an intricate network of roads. It could therefore be re-created as a mixed use zone that would be valuable to the city which is in need of usable land for social housing and other infrastructure.

The community around the mine dump was to be allowed to take part in a public participation programme that would allow it to take part in the decision making of what the mine dump represented and how they could benefit from it (ibid: 8).It could

not be ascertained whether such a process took place, but there is no evidence of the process taking place.

Opening up the mine dump and areas (suburbs of Selby, City Deep, Park Central and Prolecon) around it would help to uplift the area around which the dump is located. As the document pointed out, this area in the city is already in decline and is in need of rejuvenation. The document pointed out its rejuvenation plan was in line with the City of Johannesburg's Inner City Development Plan and was well within the zone of the City's Urban Development Zone. Development of the Top Star would go a long way in uplifting the area and encouraging other landowners nearby to do the same at the same time eliminating criminal elements (ibid).

The financial implications of the project which occupied a paragraph of the 27 page document make the intentions of CGR quite clear. The immensity of the implications and the gains that were going to be accrued from the project could have warranted more than a paragraph of the whole document. However with very little said the Table 2 below shows how CGR was going to benefit from the redevelopment of the mine in terms of financial gains.

Table 2: Value of Top Star Net Present Value in 2006

Gold Price	R85 000/KG	R90 000/KG	R95 000/KG	R100 000/KG
CGR excl. Top Star	R54,146 million	R98,815 million	R143,496 million	R188,165 million
CGR incl. Top Star	R77,240 million	R124,902 million	R173,576 million	R220,238 million
Value of Top Star	**R23,093 million**	**R26,087 million**	**R29,079 million**	**R32,073 million**

Table 2 _Source: Motivation document for permission to submit mining right application reclamation of the Top Star Dump Johannesburg, Gauteng Feb, 2006. 2006. Compiled by Crown Gold Recoveries. PHRA-G Archives Top Star Mine Dump File

CGR expected to mine approximately 260 000 tonnes per month with the grade of 0.780grams per tonne at an extraction efficiency of 65%. Using the formula (gold = tonnage x grade x efficiency) it is possible to calculate how much gold there were expecting to get per month. The amount of gold per month would be 131 kg of gold if

this would be multiplied by the minimum price of gold per month of R85 000/kg the amount of money the gross per month would be R11 204 700. It was estimated that they would at least have 8 months of such a high grade of ore (ibid: 4). Though the Net Present Value does not include an outflow of the costs from the wage bill and procurement and sustainable development the figures nonetheless illustrate what a huge financial value could have been realised for CGR and its subsidiaries. Such a huge profit would be hard to pass up let alone assign to the footnotes of a motivation document. The attempt by the company to underplay the amount of money they would benefit from mining the dump shows how important it was in terms of increasing the assets base of the CGR group. In the end it was really about substantial financial returns, 32 billion to be exact versus heritage. In a developing country such as this one it is not surprising that given such financial gains the law tends to favour mining companies when there is a need.

The method of mining that was proposed involved the use of front–end loaders (FELs) to load dump material to a collector bin from there transported by a conveyor belt to a screen and mixed with water from Crown mines' nearby plant then pumped to the plant for processing (SA Mining, undated). The residue after the extraction of gold would not be returned to the site but would be deposited on the CGR complex (ibid). The sand on the mine dumps would therefore be removed and rehabilitation would take place changing the skyline of the Johannesburg forever.



Fig 10 and 11 Mining Activities at Top Star.
Source Monika Làuferts January 2010

3.5 Heritage and Environmental Issues from a Mining Perspective

Heritage and cultural issues were mentioned in a brief and rather in a dismissive manner in the report. Criticism was made for the lack of a comprehensive list of heritage sites in Johannesburg and according to the report, this meant that there was: ' ...no consistent definition of what consists as heritage or what is considered significant'(Motivation document 2006:17). The report went on to state that the reclamation of the mine dump could contribute to the Johannesburg City Heritage Registers, which would include the listing of properties of significant heritage value. While the contribution to such a cause is indeed commendable it is clear that the CGR team did not understand or did not want to understand the full workings of the heritage law in the country and did not also understand the different functions of the different heritage bodies and the City with regards to heritage.

Although it is true that the heritage register for the City has not been updated for a long time largely due to the fact that only a few heritage sites have been added to it since the register was inherited from the National Monuments Council (Interview with Eric Itzkin Deputy Director of Art and Immovable Heritage, City of Johannesburg: 2010), it is not correct to assume that this would lead to inconsistencies with regards to what is and what is not considered heritage. The National Heritage Resources Act 25:1999 states and defines what is considered to be heritage very clearly. The absence of a site in a heritage register does not in any way diminish its inherent importance as a heritage site. The main function of a register is to make sites more conspicuous and perhaps attract a larger number of visitors to them if they are open to the public. The City can only update a register if all the significant sites have been assessed and declared to be of local, provincial or national importance and that is not the function of the City but of the PHRA-G and SAHRA.

The motivation document goes on to state that: 'there a number of other mine dumps in and around Johannesburg that are not feasible for reclamation activities and will therefore remain intact as part of the City's historical skyline' (Motivation document 2006:17). The idea of the changing of the Johannesburg's skyline because of the re-mining of the mine dumps has raised concern among heritage activists. The proposed disappearance of Top Star was therefore dealt with on the grounds of a

spurious argument as there would be other dumps that would remain untouched either because there are not as profitable or because there are not accessible. What the CGR failed to realise or did not want to realise is that once the sand on Top Star was removed the historical skyline would have been altered forever. Perhaps the most important omission is that the other dumps probably do not have as much significance as Top Star and do not carry as many associations as Top Star does. So heritage objections would not be because CGR wants to re-mine another mine dump but because they want to mine this particular mine dump.

In terms of the environment the document manipulated the environmental arguments and stated that the re-mining of the dump was going to be of service to the environment as they would be removing the sand that has been responsible for the pollution of surface and underground water pollution as well as air pollution (ibid). Though the dust levels and the noise would increase during the operation phase the advantages were going to be seen more in the long term where there would be an improvement of air quality in the future. Other mining companies have also seen re-mining dumps as a solution to the water pollution that is caused by acid drainage. Rand Uranium is looking into the re-mining existing dumps in the West Rand area for gold, uranium and sulphates and they recognise that this is a commercial solution to the rehabilitation of all dumps in the area (Interview January 2010 with Mariette Lieferink an Environmental Activist who is the CEO and Founder of the Federation for a Sustainable Environment, a NGO recognised as the most prominent environmental stakeholder in the mining industry). The environmental solution in this case may well be the re-mining of the dumps and this clearly coincides with the intentions of the mining houses.

When the provisional protection of Top Star fell away in 2008 re-mining began in earnest in August 2008, though PHRA-G issued warnings and stop orders operations went ahead regardless. The spokesperson for DRD Gold Limited James Duncan, was quoted in June 2009 saying 15% of the dump has been mined already we have reached the point of no return' (Davie 2009 : 1). It is clear that Top Star is a prime resource in terms of its financial potential with a value of between 23 and 32 billion. Any mining house that has ownership of it would be itching to mine it as soon as possible. With the recession that has hit the world economies from 2008 – 2009

investors have tended to pull their money from other commodities and put their money in gold and has this has increased the profitability of mining gold. The price of gold therefore went up and reached its highest level in decades and therefore the value of Top Star increased dramatically in the past 2 years making it even more attractive to re-mine the dump.

3.5 Conclusion

It is not difficult to understand why CGR thought it would be to their advantage to disregard all the heritage implications and commence mining without proper heritage assessment. The financial implications though mentioned in passing in the motivation document are clearly the most pertinent and although the motivation document tries to conceal this by praising the development as being the best for the community the disguise is poor. Confronting such monumental revenue it becomes more and more difficult for heritage decision makers to motivate for the retaining of the mine dump and to be in the position to take strong action against the mining companies. In the end it becomes a contestation between a heritage body without teeth and a powerful mining industry which is in control of the South African economy. Added to this already complex equation is the issue of the environmental and health problems that are associated with mine dumps. The next chapter will look at these issues and the complexity of the issues surrounding communities in the West Rand mine dumps.

Chapter 4 - Environmental Problems Associated with Mine Dumps and Mining Landscapes

'How do you appreciate something that poisons you?' Godfrey Makomene Community Member Meadowlands Informal Settlement.

4.1 Introduction

In this chapter focus shifted from Top Star mine dump to mine dumps in the West Rand. The reason for this is because Top Star mine dump is not situated near any community therefore the full impact for the environmental problems caused by the sand is not obvious with Top Star. For this reason I decided to focus on mine dumps which are situated in the West Rand area near communities which are mostly informal settlements. The map on Fig 12 clearly shows the distribution of the mine dumps mainly in the south western townships and how some of those communities are densely populated.

When mining ceased in the Central Rand in the mid-seventies there was little environmental legislation in place that required mining companies to rehabilitate and manage their tailings, dams and dumps (Mphephu 2002: 1). This has ultimately led to the problems that are currently being faced by communities that live in close proximity to the mine dumps. Over the last few years more and more factories are forced to produce goods in a more environmentally friendly way and to adopt 'green' measures that reduce the emission of carbon gases (Interview Mariette Lieferink Environmental Activist :2010).

There have been also calls for companies to dispose of their waste in a more environmentally friendly manner and more and more people have taken to recycling their waste material as a way of reducing the amount of waste that is deposited on the environment (ibid). As climate changes, fresh water has become scarcer in some areas, environmentalists have also turned their attention to conserving the water that is available and making sure that it is not polluted. The change has also been noticeable as there are more that lobby for the safe disposition of waste and the rehabilitation of areas that have already been considered to be polluted by industrialisation. There has therefore been more focus on mine dumps and mine

tailings, their effect on the environment and their impact on the people who live around them, resulting in calls for the safe disposal of the toxic waste. This has resulted in direct clashes with heritage bodies and people who regard the dumps as heritage.

The mines in South Africa are now bound by the law to conduct Environmental Impact Assessments before the commencement of operations and to have an Environmental Management Programme to manage and minimise the effects the operation may have on the environment. This chapter will raise the contradictory issues involved in consideration of the mine dumps as heritage versus their environmental impact. It also discusses the environmental concerns that people have with regards to the mine dumps as well as complaints that they have with regards to air pollution and any allegations that they may have with regards to the health problems they face because of the mine dumps. This chapter, will not evaluate whether indeed the mine dumps area a health hazard to the people who live near them or not. It seeks only to point out what some of the challenges are in heritage terms when the heritage objects or features of the ‘cultural landscape’ are widely considered to be toxic.

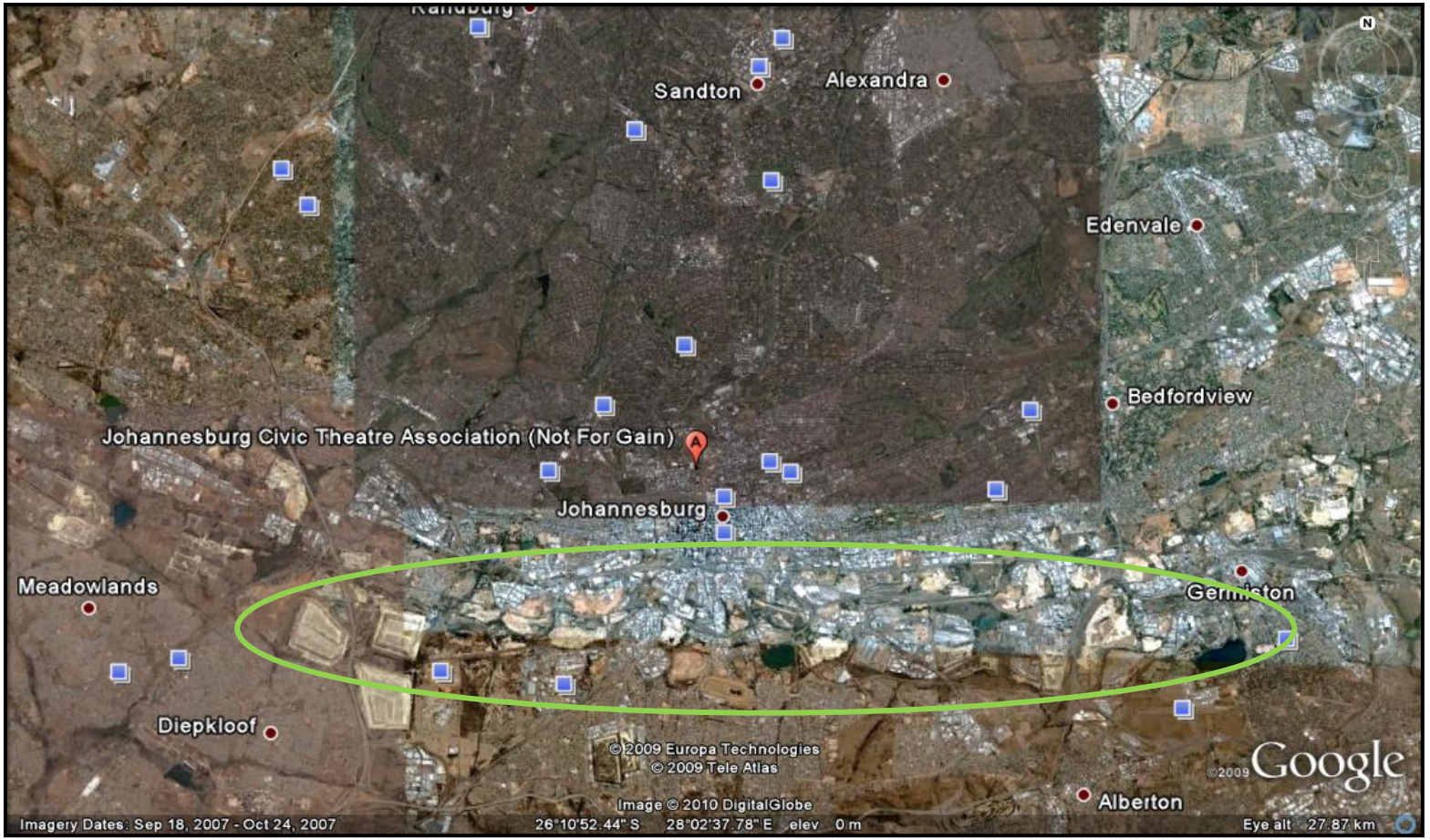

Fig 12 Aerial Map Showing the geographical distribution of mine dumps in Johannesburg.
Source Google Maps

Legend

Area concentrated with Mine Dumps

4.2 West Rand Communities and their Environment

From Fig 12 above, it is clear that the most densely populated areas which also happen to be the poorest suburbs' in Johannesburg are located near the mine dumps. Many of the people that live near the mine dumps complain of dust that is blown in their direction especially during the dry seasons (Interview Members of Tudor Shaft Community January 2010). According to one piece of research South Africa has about 6 000 abandoned gold and coal mines and most of the gold mines in Johannesburg are concentrated on the West Rand and they have left a legacy of water pollution that threatens plant and animal life (Munish 2008:1). Rand Water which supplies water to 12 million people in Gauteng and parts of four other provinces draws water from the Vaal Dam which is upstream and is frequently polluted by the acid mine drainage. Rand Water claims it is doing everything that is possible to neutralise the acidity of the water however there have been claims by the community that the water is poisonous and it is not sustaining plant and animal life around it (ibid).



Fig -12 - 15 Acid Mine Drainage Wonderspruit Mogale City.
Source Judith Muindisi January 2010

Though other mining houses like Rand Uranium have decided to re-mine the existing dumps for gold, uranium and sulphates what is unclear is the effects re-mining has on the existing mines in other words what sort of waste is produced by the re-mining and where that waste is going to be deposited. Interviews held with the communities who live around the mine dumps showed that the communities who live around the mine dumps and tailings are not aware of the effects of contaminated water on their health or even how contaminated the water is.

Research has established toxicity as far as the non-scientist is able to tell. But has this knowledge become available to communities affected by it? Do they have a sense of the health hazard the mine dumps pose? To determine whether people knew about the mine dumps and the fact that they may be toxic interviews were conducted in Tudor Shaft, an informal community in Mogale City, Krugersdorp where there are huge mine dumps in the area and where DRD and Mintails have been re-mining. The area which was a gold mining area is littered with mine dumps standing as remnants of past mining glory. One of the unfortunate remnants of the gold mining era is the tailings dams that have been tested and bear unusually high levels of uranium, lead and other heavy metals. The area has therefore been recognised as being radioactive and not suitable for human settlement (Mariette Lieferink Interview 2010). Despite this, there are no warning signs on many of the slime dams and often there is no fencing to keep animals and people away (see fig 12 -15). The acidity of the soil and the water is clearly visible as the topsoil has changed to a whitish colour on the side of Wonderspruit Dam in Krugersdorp.

In Tudor Shaft the land and water is reported to be even more polluted surprisingly an informal settlement has sprung up less than 500 metres from a radioactive dried - up dam and local government authorities have not done anything to warn community of the dangers that are apparently lies next door. Less than a kilometre from this area and still on condemned radioactive land, RDP houses for the poor were built. According to Mariette Lieferink (Interview 2010), when the proposed plan came forward to build the houses she warned local authorities, including the Councillor, of the effects of exposing people to radioactive material for a prolonged period. But the Councillor refused to warn people as it was near election time and houses for the poor seemed to be foremost on the election campaign agenda. She then held

workshops to inform people of the dangers of the dust from the mines, heavy metals from the dams and radioactive land but her progress was hindered, her interventions labelled as being counter-productive and she was threatened with violence (Interview Mariette Lieferink January 2010).



Fig 15-17 Communities of Tudor Shaft Mogale City, in clockwise direction RDP houses, Informal settlement and abandoned farm house now inhabited.
Source Judith Muindisi January 2010

A grim picture emerges of mining companies prepared to put profit before people and environmental concerns and of local politicians colluding with or being pressured to collude with them. Against this backdrop one begins to wonder how the affected communities perceive the mine dumps. According to Sylvia Barnard who lives in Tudor Shaft informal area less than a kilometre from a tailings dam and two huge mine dumps (Sylvia also works as an assistant for Mariette Lieferink): “People use the water in the dams and pools around to grow their crops, wash their fruits, and drink because though we have communal taps but there are not enough for everyone. We do not know that the water is dangerous, children play in it and if they do not get sick how will we know?” (Interview Sylvia Barnard January 2010) She went on to explain that even if people knew of the effects of the water pollution and

how it affects their crops they would still water their plants because they have to subsidise their living with mealies and vegetables because they do not have any other alternative (ibid). It was clear that Sylvia was an exception in the community knowing more than most because of her work with Mariette Lieferink. Most people in Tudor Shaft have no idea that they are living on highly radioactive land and that their groundwater and surface water is contaminated (Interview Mariette Lieferink 2010). The communities around the dumps appeared unaware of the dangers effects of the water pollution which were more apparent to farmers as they could see the immediate effects of the water on the animals and the plants.

An interview with farm owner Dawn Potgieter did reveal that farm owners were well aware of the negative effects of the mine dumps and the acid mine drainage but were powerless to do anything to stop the escalating problem. Dawn and her husband own Twitchers Eden Farm in Gerhardminnebron in the West Rand. They bought the farm several years back not knowing the state of the farm but after a few years of farming they discovered that their livestock and crops were not doing well (Interview Dawn Potgieter 2010). She alleges that there are huge cover ups by the mining companies who own most of the water testing stations. According to her, the water tested by the stations from the mines reveals that the water was safe to drink. But when it was tested by other independent water testing stations it was revealed that not only was it contaminated but that the soil was as contaminated as well (ibid). Out of conscience, she says they have not been producing any crops for sale to the markets. However other farmers in similar situations continue to sell their crops as not doing so would make them bankrupt since most of them depend solely on the farms for their livelihood.

Dawn's family have for the past four years been buying bottled water for cooking, drinking, brushing their teeth and washing fruits. Her daughter, who was expecting a baby, and who stays with them on the farm was going to use bottled water for bathing the baby. It is obvious that Dawn has no confidence in the water and the environment in which her family lives. She even has less confidence in the government authorities to deal with the mining houses who caused this problem. Asked who should be held responsible for this degradation on the environment, she answered that she fully recognised that the problem was not just with the companies

re-mining the dumps and the old shafts now but had already existed a century ago when the mining companies were using dangerous chemicals without proper environmental monitoring (ibid). She recognised that many farmers realised that it was difficult to make some of the new companies such as Mintails pay for the mistakes of older and probably non-existent companies. However, she mentioned that DRD was re-mining in the area and some of the farmers were taking them to court for compensation as they are having their livelihood destroyed (ibid). Her main concerns were that many unsuspecting people are being poisoned through the food they eat without knowing it. She pointed out that when shops that sell organic products buy from 'organic' farmers they do not test the soil or the water for uranium levels or other heavy metals that could end up in the human system through the food. They test only for chemicals in fertilisers and pesticides and leave it at that, "One wonders then how organic the products are? The worst thing is that the farmers who produce these organic products are within a 50km radius of Johannesburg and quite a lot of them come from the areas that are severely affected by acid mine drainage, there are literally farming on radioactive land and their animals are drinking contaminated water and nobody cares." (ibid)

On the West Rand there have been communities who have complained of the water pollution and have demanded that the nearby mines pay compensation for their loss of income due to the polluted water. African Bush Adventures wrote letters to the Water Affairs Department in September 2008 detailing the death of aquatic life, buffalo and the abortion of rhino babies attributing them to the quality of water that is from the mines in Gauteng Eastern, Western and Central basins (Munshi 2008:1). The compensation for communities such as these is not directly forthcoming as it is not only difficult to pin the contamination on one mining company, but also the process of suing for compensation is a long and drawn out one that often takes years to bear results and in most cases the communities do not have the right contacts or money to pursue the matter against big mining houses. While this is in process communities often continue to lose their normal income due to the contamination of water and put their health at risk.

Lulama Nhlabathi, a candidate attorney for the Legal Resources Centre commented that their organisation has been going through litigation with Xtrata, a mining

company which is mining coal in the Belfast region of Mpumalanga for the past five years (Interview Lulama Nhlabathi January 2010). The community that lives in the area where this mining company has been operating has been besieged by strange diseases especially among the children. There has been an increase of miscarriages, tumours and cancers among the population. She noted however, that none of the members of this community had associated the illnesses with the waste that was being deposited into their rivers until a farmer who lives in the area began to see an increase of miscarriages and deformities with his livestock (ibid). The farmer, after taking the water and the soil for testing realised that they were living on toxic waste. He conducted his own testing after the company had refused to cooperate and pay for the tests (ibid). According to Lulama, the problem lies first with the government which issues water licences in such places that then allows people to settle in these areas, and with the mining companies that operate in areas such as these without proper environmental assessments. The poor communities obviously suffer the most and without proper education they do not understand the negative impact of the mining activities on their health or on their livelihoods.

4.3 Dust Storms and Air Pollution

While sometimes, it is not possible to see the contamination of water with the naked eye the dust storms in places where the dumps are present are legendary. The powdery texture of the sand on the mine dumps makes it easily blown away by the wind, especially in the dry season sometimes making visibility impossible for a couple of metres. Godfrey Makomene who lives in Meadowlands, also near the mine dumps said the dust storms are so severe that one can barely see a hand stretched in front of them. During the months from July to November, before the rains start, the problem is so severe that some people cannot cook because the dust goes into their food (Interview Godfrey Makomene January 2010). When asked if he saw beauty in the mine dumps he answered back with the question: “How can you appreciate something that poisons you?”(ibid)

Despite some of the measures that have been taken the fine sand continues to be a problem. According to Mphephu (2002:1) mitigating measures that have been introduced on the mine dumps have sometimes proved to be unsuccessful some of the dumps are acidic and they do not support plant life. In some cases there has

been liming of the sand so as to raise the PH level so that it can begin to support the plant life and reduce the dust blowing from the surface (ibid). This in most cases does not solve the problem but merely reduces the amount of dust blown. People who live around mine dumps are the most affected by the storms and many complain that they are not able to keep their houses, clothes and roofs clean (Interview Sylvia Barnard 2010). What is more disturbing however is not the hygiene aspect but unproven accounts of an increasing number of children and adults experiencing health problems such as upper respiratory tract infections, deformities, kidney problems and lung cancer (Mphephu 2002:3). People like Dawn and Sylvia complain bitterly about the effects of the mine dumps on their health and livelihoods. Dawn Potigieter mentioned that the problem was that one does not know how much of the sand particles they have breathed in during the dust storms, how much they breathe in everyday and what long and short term effects the powdery sand has on their health.

"During a dust storm our whole property is covered with the sand. It's everywhere and somehow at the back of your mind you know that this is not just sand, it's toxic waste full of chemicals and you are living with it. I just wish the sand could be removed and if people really like the sand mountains then they should get clean sand instead. This stuff is dangerous" Dawn Potigieter.

"I met a girl the other day who grew up here in Meadowlands their house is right next to the dump, she is so thin, she is sick, coughing, not TB just coughing and she says it's from all the dust that comes to their house. People are dying from this sand. I think it's very sad that these tourists love them" Godfrey Makomene.

"My nose right now is fine so is my voice because it has been raining and there is no dust. Since I started staying here I have had a continuous sinus problem, flu like, 24hrs a day, 7 days a week and it's because of the dust. I won't bring my children here its better they stay in Taung" Sylvia Barnard.

It is not easy to dismiss such reports as unsubstantiated allegations. They should be taken seriously and investigations done to find a link between the health complaints and the dust blown from the mine dumps. It is a well-documented fact that some mine dumps which have not been properly rehabilitated contain trace elements and residuals of silica, zinc and sulphur which are known to cause diseases such as asthma, tuberculosis, silicosis (also known as white death) and cancer (Ramalata 1999; Mphephu 2002; Khumalo 2006). What are missing though are studies that will provide a direct link the prevalence of such diseases in these communities and

Johannesburg's mine dumps. Such studies will no doubt improve the quality of life for the communities who live near the dumps but they will also raise awareness about toxic waste and create dialogue that could lead to tighter measures for disposal of mining waste and rehabilitation of the older mine dumps. Though the scientific chemical contents of the dumps were not investigated in this study, what emerges from these interviews is that the people who live in the vicinity of the dumps, while not necessarily being aware of some of their toxic components do not consider them to be in any way significant and find their impact on their local environment unpleasant. It appears as if there is a perception that there are loved by outsiders – tourists and that there is a deep cleavage between the perception of the locals and that of 'outsiders'.







Fig 18-20 Amberfield Retirement Estate Randfontein showing a mine dump in the background. Source Judith Muindisi January 2010

Another interview held with Peter (not his real name) who wished to remain anonymous for fear that he might lose his job, a security guard at Amberfield Estate

in Randfontein, also revealed that there was no love lost between the mine dumps and the people who live next to them (Peter: 2010). Although Peter does not live near the dumps he works right next to them and he says when the storms are severe he can barely see one meter ahead of him (ibid). He also said it would be better to remove them. Amberfield Estate (Figs 18-20) is a sad example of an elite housing development that was carried out without proper environmental consultations. The housing development which now lies empty is less than 500m from a radioactive mine dump that someone has tried to cover unsuccessfully. The Estate bears testimony to the waste in resources that can be incurred if proper procedures are not followed. The complex was built as a home for the elderly and boasts state of the art facilities such as an amphitheatre (figs 18-20) tennis courts and exclusive apartments. All have been completed but the developer has since gone bankrupt as he failed to sell units. The property has since been sold to Standard Bank and lies empty. Besides the radioactive dump the property is also riddled with sink holes almost 50 metres deep since it is built on compromised land.

It is clear with this development, no risk assessments, let alone environmental assessments were done, where does this leave us as far as heritage is concerned? What emerged through the investigations was that the local communities have no knowledge about the mine dumps, they do not want to be associated with them and they have attached no value to them. It raises the question of, if at all mine dumps should be regarded as heritage, then who should be the custodian of this heritage? Also, if communities living near the dumps can be regarded as interested parties in the interplay of conserving the dumps would their opinion not be of more value than that of communities who live in the northern suburbs and are hardly affected by the mine dumps? In the debates that ensured on Radio 702 Jenny Cryws-Williams Show on the topic of the reclamation of Top Star mine dump, the West Rand communities were not represented and not one caller talked about the environmental and health implications of preserving the mine dumps. It was clear that participants of the show were concerned with the change of Johannesburg's skyline. Graham et al rightly noted that, in urban cultures powerful groups will attempt to determine the limits of meaning for everyone else by universalizing their own cultural truths through traditions, texts monuments and pictures (2000:13). If this should be allowed to

happen in the context of Johannesburg's mine dumps it would take us back to the time when disadvantaged communities could not participate in a dialogue of if it is heritage, whose heritage is it and how it should be preserved and presented.

4.4 Conclusion

Environmentalists feel that the rehabilitation of mine dumps should be on the priority list rather than re-mining and conserving the dumps as the livelihoods of people is dependent on good quality water, good air quality and environments that can sustain healthy flora and fauna. In this case the interests of the environmentalists and the miners are in tandem in that both want to remove the mine dumps and rehabilitate the land. The communities who live around the mine dumps also have much to gain from their removal as it would remove the major cause of the dust pollution and possibly the direct cause for a variety of ailments. As heritage sites in a particular place are usually valued by people who live near them, the fact that most of the people who live near the dumps do not regard them as valuable then raises the question about whether they truly should be considered as heritage and whether or not the heritage authorities should in fact be taking stronger measures to save them. It also leaves us with the question, to whom these dumps are valuable to and if there so important why are heritage authorities are failing to put measures in place that will preserve them? The next chapter undertakes to answer these questions.

Chapter 5 - Mine Dumps as Heritage: Arguing for Top Star

5.1 Introduction

The controversy around the mine dumps has been mainly been caused by the fact that a section of the population (people who include heritage activists, heritage authorities - SAHRA) in Johannesburg regard the mine dumps as heritage and as an irreplaceable asset of the Johannesburg skyline. There have been numerous radio broadcasts and articles that have highlighted the re-mining of the mine dumps and the disregard of heritage laws by different mining houses. There have been calls by heritage activists to try to curtail the high rate of re-mining that is taking place. These calls seems to have no effect as little has been done to save the few mine dumps that are left to be mined along the reef. The authorities lack of action is because of a number of reasons some which are included in this chapter, some of the reasons, include the inadequacies of the heritage laws and the inability of the heritage authorities to enforce some of the regulations. This chapter will also explore the inconsistencies in the criterion used to grade and attach heritage significances to Top Star and other landscapes and how the Act can be used to argue for protection or against protection.

Top Star has spurred considerable debate as it is one of the most visible and certainly the best known among the mine dumps near the Johannesburg CBD. There has been calls from heritage groups such as the Parktown Westcliffe Heritage Trust that the dumps should be preserved and used in a manner in which mining heritage can be celebrated and remembered for years to come. The Provincial Heritage Authority – Gauteng (PRHA-G) has, from 2006 been handling the issue with Top Star and has so far been unable to stop DRD Gold from re-mining the dump. There have been court orders, court cases, documents written by lawyers to refute and argue the fact that Top Star is of, or is not of heritage value. The National Heritage Resources Act 25 of 1999 has been in many ways used to both support and to argue the invalidity of the claim that Top Star is of heritage value. The background for the struggle of Top Star was covered in Chapter 2 of this study.

5.2 Top Star as Heritage - Legislation

The following reasons were put forward by PHRA-G in 2007 as the reasons Top Star had been given provisional heritage protection under Section 49 of the NHRA 25 of 1999. It used some of the definitions that are outlined in Section 3 of the Act as a point of reference to highlight the importance of the Top Star. These definitions are mostly used to assess the degree of significance of a site and therefore if a protection of that site is applicable or not. The documents that were sent to DRD legal representatives were torn apart one by one as reasons the mine dump was to be declared. Section 3 (3) of the NHRA gives reasons why a place, object etc may be considered to be national estate.

"*Without limiting the generality of the subsections 1 and 2 a place or object is to be considered part of the national estate if it has cultural significance or other special value because of: its importance in the community or pattern of South Africa's history"(National Heritage Resources Act 25 of 1999: 14).*

Sub-sections a, e, g and h of Section 3 (3) generally states the importance and or the association of the place or object to a particular, group or persons (ibid). This at first glance seemed to have a balancing effect giving an equitable distribution to heritage from previously disadvantaged groups, as people can legitimately argue for the association and cultural importance of their objects and sites. This however becomes problematic when one applies it to Top Star mine dump and other dumps. DRD through its lawyers, has pointed out that there are no communities to speak of who are directly associated with the mine dumps. The mine dumps were mainly worked by Southern African migrants who have either returned to their homes or have been assimilated into the South African society. It is almost impossible to trace the direct communities that either worked on the mine that produced the dumps or lived nearby. Without these communities special association and attachments that are made to certain sites become invalid or hard to establish. Stories and narratives that could have added value in the preservation of the dumps are silent because of the absence of these people. In many cases it is the story behind the landscape, object or site that gives it value. It should be noted however that the lawyers ignored the fact that people who had memories of Top Star drive-in could also be regarded as a community.

Heritage activists such as Flo Bird (who also represented the Parktown Westcliffe Heritage Trust) have put forward several reasons why the dump should be preserved and chief among these reasons is its significance as the first drive-in in Johannesburg and its cultural importance as part of the popular culture of the 1970s. The activity of going to a drive-in (American style) was certainly a key part of the 1970s popular culture in many parts of the world. In the context of Top Star 'cultural' is taken to refer not to popular culture but to 'traditional' culture or culture associated with African communities. This narrow definition and its origins as a racially segregated cinema make it unpopular and politically incorrect to argue for its preservation. It is clear that when Bird is addressed the subject she was nostalgic. Such nostalgic feelings were also expressed by callers to Radio 702 during a Jenny Crwys-Williams Show which addressed the re-mining of Top Star where most told stories of how the drive-in was a significant part of their childhood memories (Radio 702 Jenny Crwys-Williams Show: Top Star Program 2010) . Coombes discusses the dangers in idealistic nostalgia where one reproduces a utopian past. While such dangers are inherent in any recounting of the past it is also useful to realise that in most cases nostalgia, even when it based on largely the imaginary, is a powerful tool in shaping opinion (2004:124). There is no doubt that there is merit in the argument that it is the first drive-in in the country and it being part of the popular culture however Top Stars' preservation based the nostalgic memories has been dismissed as exclusionary and therefore void of significance.

Besides this fact, it was clear that Bird was concerned with the recognition and preservation of mining heritage in general (Interview Flo Bird 2010). Except for a few artefacts that have been preserved and transported to Main Street in Johannesburg CBD where most mining companies' headquarters are, there is very little to commemorate the mining history of Johannesburg. According to Bird (Interview 2010), the very mining companies that are involved in the degradation of the environment should give back to the environment and communities they have exploited by at least memorialising the mining history of the country and honouring the lives of the migrants who came from all over Southern Africa to work in Johannesburg.

Heritage practitioners are quick to mention though, that, communities are not only locally geographically defined but also bound together by common social, cultural and economic and or political circumstances (Smith 2006:28). It is clear that the patrons of the drive-in cinema regard themselves as a community and because of their association with the cinema feel they have a say in its preservation. However, the fact that the interpretation of what and who constitutes a community is not defined in the Act leaves those subsections open to various interpretations. 'A community' for the mining houses are the people who historically worked on the mine dumps and whereas heritage bodies define communities as those who identify with a common place through the memories associated with it. Every section of the community with interests in the mine dumps will therefore use a definition that suits them to argue for or against. In the case of Top Star the mining community would like to argue that there is no community that is associated with Top Star and its origins.

While PHRA-G tried to associate the Top Star with Ferreira and the beginnings of Johannesburg as a town, and also pin associations on to several of the Randlords (ibid), this attempt was unsuccessful. There are several mine dumps that Ferreira and other important Randlords are associated with in terms of them being remnants of well-known mines. In this case it has been argued that the same kind of furore that has been generated by the mine dumps has not been displayed for the tailings, headgear, miners houses, hostels and other mining equipment that is rotting in and around Johannesburg. Why the mine dumps, if other objects and places associated with the same origins of Johannesburg and mining of gold are not treated with the same kind of interest? While this is a very interesting debate it ultimately reveals the shortcomings of the Act or illustrates that the Act does not actually cater for certain kinds of landscapes or gives preferential treatment to some communities.

"*Without limiting the generality of the subsections 1 and 2 a place or object is to be considered part of the national estate if it has cultural significance or other special value because of: its strong or special association with a particular community or group for social, cultural or spiritual reasons." (National Heritage Resources Act:14)*

According to the legislation the groups and communities must prove a special kind of association that they have with the mine dumps before the link is accepted. In most cases, as Gunner argued, the primary claim to a landscape often lies in its

ideological, symbolical, and spiritual meaning therefore rendering it the term of a cultural landscape (Gunner 2005:3). This is expressed in Section 3 Subsections b,c,d of the NHRA 25 of 1999 which defines objects or the places as either cultural or natural heritage. The mine dumps do not fit into either of those categories. Mainly because cultural landscapes have spiritual connotations to them and communities who revere them may have all sorts of spiritual reasons why they find them significant. It is also worthwhile to note that some cultural landscapes as with the Matopos in Zimbabwe do not have a single meaning but are shaped by politics and have acquired different spiritual meanings (Ranger 1999). Therefore when one looks at cultural landscapes one maybe surprised to find a layering of meanings, which may make a landscape very difficult to understand and claims very difficult to arbitrate. The mine dumps have no people who visit them for spiritual or religious reasons, for pilgrimage or performing special ceremonies or rituals whereas the legislation is biased towards such sites. The mine dumps consequently do not fit into this category.

"*Without limiting the generality of the subsections 1 and 2 a place or object is to be considered part of the national estate if it has cultural significance or other special value because of: its importance in demonstrating a high degree of creative or technical achievement of a particular period (National Heritage Resources Act 25 of 1999:15).*

The site of Top Star was put forward by the PHRA-G as being representative and visible example of mining activities that demonstrated high technological and technical achievement of that time. The elements that were cited as being the most important achievements at that time were the development of deep level mining, the implementation of the MacArthur Forrest cyanide process and the technological developments and achievements that were associated with the reprocessing of mine dumps and slimes dams for the harvesting of residual gold (Werkmans 2007). The lawyers from DRD were quick to point out that Top Star was a residue of these processes and it was even less significant, given the fact that there are hundreds of other stockpiles of residue generated from the same processes. What therefore was the reason to make this particular mine dump more important than the rest (ibid: 3)? This argument is difficult to refute as there are indeed many mine dumps which are a residue of the same technological advancements that were there at the time others have already been re-mined without a second thought, others are also not targeted

for re-mining. It was therefore important for PHRA-G to be able to point out the uniqueness of the technological advancement before this argument could be made acceptable.

"*Without limiting the generality of the Subsections 1 and 2 a place or object is to be considered part of the national estate if it has cultural significance or other special value because of: its importance in demonstrating the principal characteristics of a particular class of South Africa's natural and cultural places or objects (National Heritage Resources Act 25 of 1999:15)."*

It is unfortunate that the mine dumps do not fit into the generic bill of natural landscapes as well. They are man-made and have been altered considerably over time and therefore do not meet notions of authenticity and integrity that are often sought in cultural and natural landscapes. According to Fowler, development on a site and around a site within a landscape can be injurious to the sites' essential quality and would be considered in world heritage terms to have diminished integrity (Fowler 2004:5). Furthermore the qualifications of natural landscapes are usually because of their outstanding features that make them aesthetically pleasing. (Subsection *e* of the Act)

5.3 Aesthetics and Art on the Mine Dump

As with a lot of industrial heritage the mine dumps are regarded by some as ugly and cannot be compared to the natural beauty of the Drakensberg or the Table Mountains, this comparison is in many ways misplaced as no two landscapes can be the same. However, it must be noted that some people do find them quite attractive in unison therefore this clause is subjective to the beholders eye and therefore difficult to use as a fact in the retention and conservation of the mine dumps.

The fact that the communities who live around them do not value them or see them as aesthetically pleasing but rather see them as a health risk, makes their value in terms of this criterion questionable. According to Godfrey, "If people were asked what they really want from the mine dumps they would say jobs because that's what they want and need. What would it help just to keep a mountain of sand for its beauty if it cannot create jobs and that is the reason why Central Rand Gold has a lot of support from people in our community. They want jobs and to put food on the table" (Interview Godfrey Makomene 2010).

Artists however cherish the rawness of the mine dumps which they believe parallels and reflects Johannesburg's society and its beginnings. William Kentridge, a renowned artist who in the past exhibited installations on the mine dumps says that, 'Johannesburg mine dumps rough as there are, are more a reflection of the society than some decorated perfection of some other cities' (Sawubona April 2007). It is for this reason that Kentridge has found them a fitting setting for many of his exhibitions.

Other artists have also found the mine dumps an inspiration and have featured the dumps in their work. An exhibition which opened at the Anglo Ashanti Gold of Africa Museum in Turbine Hall, Newtown Johannesburg on the 11th of November 2009 featured an exhibition 'Mine' which is an exhibition of oil paintings documenting the disappearing mine dumps (www.neibuhr.co.za). The Johannesburg artist Hermann Niebuhr explains that there is a certain sadness that he found in the disappearances as some of the mine dumps do not have names and will not be commemorated once they have been re-mined. The exhibition featured three major themes, 'a landscape that refuses to remember itself, a city built on fate and the forces of the gold rush and the paradox of the poisonous beauty – Neibuhr rightly puts it when he mentioned that 'the mine dumps may look like mountains of gold dust but their bleached appearance is actually the result of the toxic process of gold extraction' (ibid).

5.4 Reflections on the Shortcomings of the National Heritage Resources Act

Generally the Act is not well publicised or well understood. The inconsistencies' in the Act also make it hard to understand and puts pressure on heritage officers as they have to determine what to do. Because of this, violations are rampant and heritage bodies start fulfilling the role of gatekeepers rather than performing the core function which is to manage heritage resources. It would be interesting to understand the reasons why there are such shortcomings and why the years of consultations did not reveal these loopholes.

While the importance of the mine dumps has been argued using section 3 (3) of the NHRA the contention of the mine dumps did not begin after the Act had already been passed but rather long before the Bill had been passed as law. While the Act was still in formulation there was a clause in the Bill to protect the historic mine dumps as

elements of industrial heritage, which was fitting as most mine dumps fit right in the era of the beginning of the industrial era of South Africa. But this blanket protection was strongly opposed by mining companies who felt the legislation would hamper their ability to reprocess the mine dumps (Hall 2005:37). After a lot of negotiations it was agreed that the blanket protection of mine dumps would be dropped and in its place a survey and assessment would be done of mine dumps over a certain age irrespective of their gold content. An agreement was supposed to be reached over what should be protected and what was not to be protected (ibid). Whether such a survey was taken or not is unclear as there seems to be no record of it in either the archives of the provincial or national heritage bodies and it is doubtful whether it took place. It is important to note how the mining companies were able to influence the formulating of the heritage legislation to their advantage.

According to Hall (2005:38) one of the main reasons there are inconsistencies in the Act is because there was no time to thoroughly scrutinise it. In 1998 Parliament was under pressure from the Portfolio Committee to submit the Bill for debate before the end of the first term of office post liberation South Africa. The Bill was submitted but only at the end of 1998 and there was therefore insufficient time to discuss it. The next year (1999), the Bill was supposed to be passed before the last session of Parliament concluded in March and the legal advisory body hard pressed for time and with other legislation to consider did not find enough time to scrutinise the Bill (ibid). It has then left the Act with loopholes or areas where there is not adequate clarity to this day.

Another reason there seems to be no effective decisive action with regards to the unlawful re-mining of the dumps is because of the function of the heritage organisation and the lack of co-ordination between these organisations. While most people seem to think that PHRA-G acts on behalf of SAHRA the reverse is actually true. SAHRA is PHRA-Gs agent (Interview Herbert Prins December 2010). Therefore the primary agent in the processing of application for alteration or the demolition of heritage should go to PHRA-G, but as most members of the public are ignorant of this fact most applications end up at SAHRA which is short staffed. The situation is not much better at PHRA-G where there are only three full time employees instead of the required 15 and the huge delays in the processing of applications often mean

the applicants to begin work before there are given a final record of decision. There also seems to be a lack of co-ordination and co-operation between the organisations which function as two separate entities rather than one.

This lack of lateral co-operation could be the reason there seems to be a lack of formulation of policies that are pro-active instead of reactive. The heritage legislation and the environment in which heritage practitioners work do not allow them to formulate conservation policies that allow for the preservation of heritage before developers begin to take apart buildings or mine dumps in this case piece by piece. The legislation does not make provision for heritage officers to identify and make conservation policies before plans are made for any development to take place. The section 47 of the NHRA only makes provision for the conservation policies to be drawn up for places that are already declared national, provincial or local heritage. The process of declaring heritage sites sometimes could take up to 3 years and most landowners not well versed in the Act are not willing to go through with this route as it seems cumbersome and restrictive in terms of future development.

The current modus operandi which is responsive to a developmental proposal is flawed in most cases the proposal will be disagreeable to the heritage authorities resulting in delays with the application process. In some cases the developer in a rush to develop the site ends up demolishing the property without PHRA_G's permission. The Rand Steam Laundries in Richmond Johannesburg are one such example. The developers usually ask and rightfully so, why nothing was done to protect the heritage before any development plans could take place. Until this gap in legislation is taken care off a lot of the heritage in this country will suffer the fate of the Top Star.

5.5 Conclusion

It is clear that what emerges from the study is that there is a need for amendments of the current NHRA 25 of 1999 so that it not only addresses the past imbalances but also recognises needs for the future. The current sections that are used to guide heritage officers as to the significance of heritage are not clear and precise and are open to different kinds of interpretations that may be given by different people with different interests.

There is no doubt that mining heritage should be preserved for future generations. However, it should be noted that in its preservation the narrative does not lean towards elitist views. According to Smith, within the narrative of the nation the heritage discourse also explicitly promotes the experiences and values of the elite social classes and this works to alienate a range of other social and cultural experiences (Smith 2006:29). In the case of the mine dumps the discourse draws too little from the descendants of the people who laboured in the mines, communities that live in close proximity to the mine dumps and those that work in the mines. Although groups which are for the preservation of heritage may not see it as such, mining companies have argued that they heritage activists are making an argument based on a socially exclusive rationale which ignores the complexity of the context in which mining heritage in this country is working in.

While the sentiment could be genuine on the side of the heritage authorities to honour the mining migrants', this move can also be attributed to the post-apartheid policy in heritage which attempts to balance the number of existing declared heritage sites in the country with those that honour the history of previously disadvantaged people. At the moment, Johannesburg has not been able to match the number of indigenous heritage sites with those in the northern suburbs that where inherited from the National Heritage Council (ibid). A lot of the declared heritage sites are Victorian houses, mostly belonging to Randlords and their associates, which show the splendour that mining wealth could buy. The call is to create a balance in the narratives presented and honour those who worked in the mines that produced this wealth. But is this best done by the preservation of the mine dumps? This study has shown that there can be no clear cut answer to this question. The answer lays in a continuation of dialogue where all opinions are taken into consideration and where mining landscapes can begin to be reused and repurposed into landscapes that honour the different narratives, which are environmentally clean and economically sustainable.

Chapter 6 – Toxic Waste Given New Meanings: International and Local Examples

6.1 Introduction

This study has a looked in detail on the issues of preservation of the mine dumps versus the economic value and environmental degradation. The need for employment will mostly likely see the continuation of scenarios such as that of Top Star. At the moment the legislation of the country and indeed the mind-set of the policy makers is that of creating jobs for the unemployed and raising the standards of living for the poor, one is left wondering if the dumps have any surviving chance given their lack of social value especially to those who live near them.

I have come to the conclusion as many authors such as Hardersty have, that if the preservation of toxic waste should be conducted then there should be either a socially or economically redeeming value to the toxic waste (2001: 21-8). This search for the redeeming social value should uncover what sort of repository the toxic waste holds to the communities around, what memories it invokes, if in any way it is symbolic. Hardersty (2001) clearly shows that there are no simple answers to the questions and ultimately the answers lie in a multi-disciplinary approach where all where these landscapes are given new meaning. The issues that the author of this article explores will be useful as these are the same issues that one grapples with when one looks at the dumps from a one sided approach, a multi-disciplinary approach is needed. This Chapter briefly looks at how mine dumps can be reused and repurposed to find another layer of meaning by drawing parallels from other parts of the world where this has been done.

6.2 Sand boarding on the Mine Dumps

One way of remedying the situation is to think outside the box and look at other ways in which the mine dumps can be used to create employment be of economic value. A look at extreme sport which has become very popular may be the solution to this problem. The mine dumps considered a health hazard by a lot of people are being used as a venue for sand boarding by extreme sports enthusiasts. The sand boarders who mostly use the mine dumps in the eastern part of the city claim that the sand on the mine dumps is much better than that on the sandy beaches on the

coastal areas. The sand which consists mostly of quartz has been so refined from the process of extraction of gold that it now has the texture of powder making it better to sand board on. According to Phil Du Plessis, one of the sand boarders and web programmer of the of the extreme sports website Pure Rush Industries, the powdery texture of the dunes allows the sand boarders to speed downhill faster than on sandy beaches but with less freedom of movement than on snow (www.mg.co.za).

Most of the beginners for this sport are taking to Mount Mayhem one of the dunes near the airport. Most of the enthusiasts say the sport is exhilarating and the rush of adrenalin is extraordinary and some are regulars frequenting the dune every weekend and public holidays. It is obvious that sand boarding offers a new exciting playground for adrenaline junkies. Though this is an innovative way in which the mine dumps can be used it must be noted that extreme sports are practised by a minority and the majority of the mine dumps are in areas where the communities are not exposed to such extreme sports. Given the number of the mine dumps it would be impossible for all of them to be used for sand boarding. Questions also remain if the mine dumps that are being used by the sand boarders have been tested for toxicity and if continued exposure to them is not negative to one's health. If such questions remain unanswered the debates currently facing the mines dumps will likely continue. However, it must be noted that it is refreshing to find another layer of meaning and use to the mine dumps and should popularity in this kind of sport persist perhaps it can be used to raise awareness and funds to rehabilitating mine dumps that are negatively affecting communities who live near them.

6.2 International Examples

In the Ruhr region, Germany, industrial sites have also realised the economic and historical value that even though the industries left toxic waste as a legacy it has not had a negative impact. The industrial era started around 150 years in the Ruhr area and at one time it was a heavily populated area as people came from all over the region to look for jobs (Vollmer et al 2006:28). After a few decades the economic changes forced the expansion and industrial activity to stop and people began to move out of the area. The area experienced a population decrease and the industrial buildings and landscapes became derelict.

The authorities realised that they wanted to bring back life to the area attract people in the area at the same time preserve the structures, buildings and uphold the historical values of the area as well as make the area sustainable. There were well aware that before people could bring into visit, live and work in the area lot had to be done to make it environmentally safe for everyone. Over a period of 10 years from 1989 -1999 six themes were introduced and the government poured in a lot of money to make the area safe through rehabilitation of the area. The six themes were living, tourism, new landscapes, ecological reworking of the river systems, creating jobs and city development (ibid).



Fig 21 Emscher Park, Dortmund 1999 Source: Vollmer et al p 63

This was successfully done as some of the landscapes were used not only as visual landmarks as shown above (Fig 21) but also as works of art. The walk in structure in Fig 21 is on top of the contoured landmark which is made out of salvaged material and is a 65m walk in sculpture. In other examples the buildings were used as works of art and recreational areas (ibid). This initiative created jobs and pulled in visitors and residents in the area. There is no doubt however that a lot of research and input went into the planning of such a feat. In this case the industrial remnants have had

an economic uplift to people living around. While this model is admirable it again may not be transferable to Johannesburg. The economic and political climate does not make it priority for the government to focus its attention on the preservation of heritage. More pressing matters such as providing accommodation for the poor and creating jobs are high on the agenda. Such development could perhaps work if there will be a clear economic and social benefit.

In another part of the world, toxic landscapes that are unfit for human and animal habitation have been turned around so that they can generate revenue by becoming tourist attractions. In a town of Sutter Creek California where traditional mining has left an imprint of toxic waste the town has been able to shift away from a mining economy to a tourist economy even though it lies right in the middle of some of the richest gold mines (Hardersty 2001). This move has had the advantage of creating jobs and creating awareness in the town and the country on the environmental degradation that the mining has caused.

6.3 Conclusion

While these examples show that if among other things, dedication, a fair amount of political will and investment is directed to reclaiming the toxic landscapes the results are remarkable. It would be naïve to think that these examples are easily transferable to South Africa. A lot more ground work has to be done before the dumps can be repurposed in such ways. This Chapter does not try to give a quick fix solution to the complex issue of the Johannesburg's mine dumps but merely tries to show that it is possible to find a profitable solution which will not only benefit the communities around, contribute to the national economy but also celebrate the various significances that the mine dumps have.

Chapter 7 – Conclusion

Various uses have been proposed for the mine dumps in a future for Johannesburg landscape. These range from the creation of a huge man-made park, to the development of the dunes as a venue for adventure tourism. What was clear throughout the course of the research was that the dumps cannot remain as there are. While posing as a health threat to communities that live around them there are regarded as an economic asset by miners. It is my opinion that their survival will not depend solely on the arguments by heritage lovers on how valuable there are but on how financially and environmentally sound that decision is.

At the beginning of the study being a heritage lover myself, I was of the opinion that mine dumps are a legacy and an inheritance for future generations and therefore should be preserved at all costs. I was of the opinion that some of the dumps were stable and not all could be considered as toxic. However during the course of the research it became clear to me that there were very little studies on toxicity of individual mine dumps and because of the seriousness of the health concerns all should be treated as toxic until they have been proven not to be. One of the main findings of the research in Chapter 4, was that the mine dumps that have graced the skyline of Johannesburg for so many years do have negative health implications to the people who live near them. Although the research did not look at the impact of the dust and quantify it scientifically it is clear that people who live near the dumps are uncomfortable around them and blame them for their various health challenges and would rather have them removed for the sake of their health or re-mined to create employment.

It was also a clear finding that some of the mine dumps have a clear economic value (Chapter 3). The mines that created these dunes used mining methods that are inferior to those used today. As mining methods have improved and deep level mining has increased the risk and the cost of mining, companies have turned to claiming and reprocessing the dumps and the results yielded from this exercise has been profitable. The mine dumps have therefore tremendous economic value. Because of their nature the mining companies have been slow and sometimes

unwilling to apply the necessary heritage permits to demolish or to reprocess the dumps because of the uncertainty in getting the permits.

Chapter 5 presented the administrative flaws and general loopholes in the heritage legislation and how the heritage bodies have not been able to enforce the Sections 34 and 36 of the National Heritage Resources Act 25 of 1999 that protect and conserve the dumps. They have also been slow and sometimes unable to execute the necessary judgement upon offenders who have gone ahead and reprocessed mine dumps without prior permission. Such has been the case with the reprocessing of Top Star mine dump by DRD Gold. While heritage lovers and activists have continuously lobbied for the conservation of Top Star because of many reasons, theirs seems also like a lost battle as they have no real legal backing from the official heritage bodies. As a result re-mining of profitable dumps will continue unabated as well as dominance of and deference of the mining industry.

Should any lasting change be made in how industrial heritage is treated the NHRA 25 of 1999 should be revised and official heritage bodies reorganised. Heritage laws in the country should be proactive instead of reactive. An example of this would be to have a heritage and geological survey of all the mine dumps in Johannesburg and ascertain their age, stability, toxicity, their background and their important associations. This would assist in determining if there are any that are stable and not harmful to communities around them. It would also ascertain the importance of each and every one of them and give heritage authorities and advantage when developers propose re-mining. This information could be layered on the City's GIS system and would allow potential developers to familiarise themselves with their potential investment before they decide to mine it or build a housing complex near one.

Definitions of what a cultural landscape and what a community is should be clearer and be broadened and not left to interpretation by the different parties. Where communities or their direct descendants are not present to claim their associations their claims in absentia must still be recognised and protected. In cases where developers seek for permits there should be met by a functioning heritage authority which is able to execute their duties timeously and consistently. There should be no room for developers to accuse the heritage authorities of a non-functionality.

Through the course of this research it has become apparent that above all else environmental concerns have to be addressed before people can begin to advocate for the preservation and the use of the dumps. It is all very well for heritage lovers to voice their concerns over the radio and other forums but until pressing issues such as dust, water pollution and unemployment are adequately addressed it will be difficult for people who live in close proximity of the dumps or anyone who has knowledge of their toxicity to appreciate them let alone see them as heritage. Through the interviews it was clear that those who lived near them did not like the mine dumps. Although the mine dumps maybe part of the cityscape and meaningful to one section of the society there are real concerns of the toxicity of the mine dumps which cannot be ignored. Power relations between the mining companies and heritage bodies cannot be ignored and though not fully recognised they are at the centre of the debate. Mining companies hold a lot of power and sometimes are able to sway decisions in their favour. The issue of preservation of toxic waste is by no means an easy topic and this study has been able to unveil how complex the issue is. A multi-disciplinary approach should be taken, in addressing it and heritage authorities will benefit from realising that in some instances there is need to address not just heritage but other issues before the toxic waste is regarded and conserved as heritage.

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Bird Flo, Heritage Activist and member Parktown and Westcliffe Heritage Trust and the Johannesburg Heritage Foundation.

Iztkin Eric, Deputy Director Immovable Heritage Johannesburg Development Authority (Informal Interview)

Lieferink Marriette, CEO Federation for a Sustainable Environment, Environmental Activist

Makomene Godfrey a resident of Meadowlands and a representative of 13 communities in Meadowlands seeking compensation from Central Rand Gold for re-mining old shafts in their area

Muindisi Arnold, Senior Geologist MTP Resources

Peter not his real name he also refused to give surname Security Guard of Amberfield Residential Development (Informal Interview)

Ramphele Maphata, Deputy Director Provincial Heritage Resources Authority (Informal Interview)

Nhlabathi Lulama, Candidate Attorney Legal Resources Centre

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Images

Monika Làuferts and Johann LeRoux

Judith Muindisi

www.googlemaps.com

www.joburg.co.za

8. Appendices -Transcription of Interviews

8.1 Interview Flo Bird Heritage Activist

Date January 2010-02-17

Venue: Flo Birds Residence in Parktown

Question: When were you in the National Heritage Council?

Answer: I was in the National Heritage Council for a couple of years and left after we were not acknowledged when the new administration took over they didn't even let us know what was happening. They just kept quiet and it was disheartening to the old board members and we resigned one by one.

Que: Have you ever held any post in either SAHRA or PHRA-G?

Ans: No, I have never worked within those bodies.

Que: Where does the Parktown Westcliffe Trust fit in the whole Top Star debate?

Ans: We are a registered interested and affected party.

Que: Have the local authorities failed in keeping the mine dumps safe? What in your opinion can be done that has already not been done to keep the mine dumps?

Ans:The local authorities have a lot to answer to, what I would like to know is why they dropped the provisional protection of the Top Star in 2008 when they had declared it 2 years before. There have been numerous instances where they should act when something like this happens and they have not. They should push the law enforcement officers to go there and make arrests if someone destroys heritage without consultation like this. I cannot go because I do not have the authority that PHRA-G has they have to do something and their inactivity just makes things worse.

Que: What in your opinion makes the mine dumps heritage?

Ans: There is no question that there are heritage there have been there for hundreds of years and people who used the Top Star as a drive-in certainly value it. We have to stop the wanton destruction of our heritage before it is too late to do so. Ah, there is also the possibility that the entrance of the Top Star was designed by Rusty Bernstein who wrote the Freedom Charter, his son believed that he did but this is unconfirmed and we do not really know if this is true or not someone has to make an investigation of this but this would make the Top Star even more valuable.

Que: How can it be conserved as heritage?

Ans: I do not think that it is an easy thing to do. James Clarke a few years ago suggested that the area where the mine dumps are from east to west could be made into a huge recreational park where wildlife could be introduced and small animals and this green space could be used to as a recreational space perhaps we could explore that.

Que: Do think this is possible with all the harmful chemicals in the dumps?

Ans: Getting rid of toxic waste is an expensive business but it has to be done, someone has to do it and the people who created this should be made to pay for it and obviously we cannot keep all of them we have to choose which can be kept so that at least some can be rehabilitated.

Que: There are concerns that the mine dumps are toxic and contain harmful chemicals that people who live near them complain of upper respiratory diseases, silicosis and some cancers. What do you think should be done about that as environmentalists argue for their removal?

Ans:I don’t deny that they might have harmful chemicals in them no, what I would like to see is the mining houses taking responsibility for their problems. Why should they leave us with nothing, no rent, no mining museums nothing. They should contribute to the mining heritage of this country.

Que: There are also complaints among people who live near the mine dumps that the dumps blow harmful dust particles which make visibility difficult to see and to breathe and also in terms of hygiene what in your opinion could change that perception?

Ans: They probably have good reason to believe that because most of the mine dumps probably are. But this is a difficult question to answer because if mine dumps are to rehabilitated somebody has to do it

Que: Do you think preserving the mine dumps will serve the interests of the people who live near them?

Ans: Most probably not but we have to pick and choose which mine dumps are to be preserved and which ones we can do away with. We cannot obviously keep everything but we cannot as well let go of everything something must be kept.

Que: How can they be preserved in such a way that will be beneficial to everyone who is interested and affected by them?

Money has always been first in Johannesburg, we all have to find a way in which we can sit down and find a solution to how everyone can benefit from the mine dumps but someone has to pay for the question who is going to do that? Capitalists?

Que: What has been the reaction of the public towards the re-mining of the dumps?

Ans: The Media, Radio 702, Jenny Cryws everybody is on their case to stop them from re-mining illegally. Unfortunately that has not stopped them, maybe if the outcry continues the people who listen to 702 which are mostly decision makers in companies and shareholders will begin to notice and perhaps make some of a difference that's what we are hoping for.

Que: What would like to see happening not just with Top star but with other mine dumps that would be perhaps a sustainable solution for the future?

It should stand as a memorial to the men who went underground men who came from all over Southern Africa and worked in those dangerous mines .There is no such memorial and I can tell you one day the descendants of those men will come

from all over Southern Africa wanting to honour their forefathers but we will have nothing to show them. We should do something now.

8.2 Interview Dawn Potgieter, Owner of Twitchers Eden Farm Gerhardminnebron

January 2010

Question: Where is your farm located in terms mine dumps and slime dams?

Answer: It is in the West Rand and we leave very near a mine dumps and a slime dam it is a very beautiful area though and our property is just lovely something that attracted us to buying it in the first place.

Que: When you bought the farm and did you know the condition of the water then?

Answer: We bought the farm a few years ago, and we had no idea that the water was polluted. We knew personally the person who sold it to us and he never said anything to us about water pollution so we would like to think that he also didn't know it would be horrible to think that he knew.

Que: How do you know that your land and water is polluted from past mining?

Ans: It's not hard to figure out really like all people we discovered through the crops and the animals. The animals were aborting frequently and our crops were not doing so well, we had to test our water and this was not just happening to us it was happening to our neighbours also. We had to find out. It was hard though there are only a few water testing stations in the country if you send your water samples to the water department they tell you your water is ok you can drink it, if you send it to the mining companies they have something to hide so they also tell you it's fit to drink. If you send it to the universities who are usually funded by the mining companies they also tell the water is safe they probably fear repercussion if they give negative reports. So the only alternative was to take it outside the country where we were told that our water that's our underground water by the way has high uranium content and was unfit for watering and drinking purposes.

Que: Does that mean that you no longer use the water at all?

Ans: We don't. We use bottled water to cook, brush our teeth, drink, wash our vegetables and fruits anything that goes into the mouth we use bottle water. We have been using bottled water for the past 4 years and we will have to continue like this. My daughter Rene is pregnant and I told her that she will have to use bottled water to bathe her baby her older two kids have at least thicker skin but this little one who is coming who knows what it will do to her. She has to protect her.

Que: I cannot imagine the cost that you are incurring

Ans: It is unbelievable but it has to be done otherwise we are slowly poisoning ourselves.

Que: What are you and your neighbours doing to improve the situation for yourselves?

Ans: Farmers are fighting the mining companies especially DRD Gold who own most of the dumps in the area so that there can get some kind of compensation. I don't know how successful there are going to be.

Que: Are you still producing at your farm?

Ans: We long since stopped out of conscience whatever we produce is obviously not safe for human consumption we are lucky that we don't rely entirely on the farm for our income otherwise we would be bankrupt. We no longer even grow vegetables for us we wouldn't eat them so who would we produce them for if we can't even eat our own produce.

Que: What about the other farmers in your area they still producing for the market?

Ans: It is sad because some cannot afford not to. They would face financial ruin if they stopped selling on the markets.

Que: Do organic shops test if the soil you are using is safe to grow crops on?

Ans: Actually they don't they test for pollution they test to see if you haven't used pesticides and fertilisers for at least ten years. No one tests the water or the soil and the pollutants and high metal content in the water and soil ends up in the animals

systems and the plants and ultimately ends up in the human system. One wonders then how organic, organic products are. The worst thing is that the farmers who produce these organic products are farmers within a 50km radius around Johannesburg and quite a lot of them come from the areas that are severely affected by acid mine drainage, there are literally farming on radioactive land and their animals are drinking contaminated water and nobody cares.

Que: What bothers you about the mine dump that is near your farm?

Ans: During a dust storm our whole property is covered with the sand it's everywhere and somehow at the back of your mind you know that this is not just sand its toxic waste full of chemicals and you are living with it. I just wish the sand could be removed and if people really like the sand mountains then they should get clean sand instead this stuff is dangerous.

Que: So you have no feeling for the mine dumps at all don't you think that there are heritage. There are some people who regard them as heritage.

Ans: No actually I don't think there are heritage I really think they should be removed I know I don't enjoy them I don't think anybody who lives near them enjoys them. Everyone wants to live in a safe environment and with this dust it is obvious that the environment we are living in is not clean. God knows what we breathe in everyday.

Que: What do you think should be done about the pollution and the land degradation?

Ans: There is no doubt that land and water purification should be done.

Que: But who should pay for it?

Ans: That's a difficult question because the people who are re-mining do not afford the rehabilitation and most probably are not responsible for the pollution in the first place. I think those mining should be responsible for paying the rehabilitation of the land and those re-mining should be helped by the government to pay for some sort of rehabilitation. Something must be done because as my daughter says we have to leave a good legacy for our children and it is sad but my generation managed to

destroy the environment in such a manner and now our children and grandchildren are going to pay for it.

8.3 Interview Sylvia Barnard Resident of Tudor Shaft Informal settlement Krugersorp

January 2010

Question: How long have you been staying in Tudor Shaft?

Answer: I have been staying here for almost 4 years now

Que: Who do live with?

Ans: I live with my boyfriend 2 children were supposed to here with me, One is 10 years and the other is 5 years, they live in Taung with my mother but I cannot bring them here yet.

Que: Why?

Ans: You see me as I am now my nose right now is fine so is my voice because it has been raining and there is no dust. Since I started staying here I have had a continuous sinus problem, flu like 24hrs a day, 7 days a week and it's because of the dust. I won't bring my children here its better they stay in Taung.

Que: What do you think causes this?

Ans:I know what is causing this, it's all this dust that is blowing into our homes sometimes it's so bad that you can't see in front of you and the dust blows on everything and with our shacks we cannot keep it out it blows in and everything our clothes, food, furniture is full of dust. We cannot cook food because the dust will fill the pots we just forget about supper when we have dust storms. I have no idea how to get everything clean.

Que: Do you think your neighbours are also affected by the dust storms?

Ans: Yes of course they also hate them and also have sinus problems.

Que: Do you think they know what causes the sinus problems

Ans: The community is not well informed about the environment some of them even cough but they do not know what is making them sick, they say it is Aids. Just a few people understand that they might get cancer, TB etc what they do not know is what they should do so that they do not get sick they do not know where to for help. Some people even carry on using the dirty water their plants what they can do they need a living they have to plant veggies and mealies to eat and feed their families if they get sick from this then they do not know it.

Que: How do you feel about the mine dumps?

Ans: I actually don't like them there are nuisances; I don't see any value in them.

Que: Other people think of them as heritage do you and your neighbours regard them as heritage

Ans: I think people generally don't care about the dumps I think they don't even care about heritage they just want jobs, the environment is not even that important to them they just need jobs. If the big companies come and to make money from the dumps the people will not protest. They want jobs, money and good housing. They will work in dangerous situations and live in dangerous situations to get money.

Que: How do you know so much about the environment?

Ans: I have learnt everything I know from Marriette I have been volunteering for her for a long time and I love the contribution that I making I am more aware I try to tell my neighbours but they don't want to hear what I have to say they ask me what I know about all this there are stubborn so I live them maybe they will listen to someone else. Even if I tell them of the dangers of the environment then they ask me how are you going to help us if we are sick and sometimes I cannot answer them.

8.4 Interview with Mariette Lieferink Environmental Activist and , CEO and Founder of Federation for a Sustainable Environment, Environmental Activist

January 2010

Interview with Mariette Lierferink Environmental Activist January 2010 who is the CEO of Federation for a Sustainable Environment recognised as the most prominent environmental stakeholder in the mining industry. FSE has won a number of awards for its work with different communities. Lieferink and her team of volunteers hold workshops among disadvantaged people living near toxic environments informing them of the dangers of living near such land she also tries to bring the various mining companies to court so that they pay compensation for people suffering from diseases caused by the toxic environments or pay for the loss of livelihood that is caused by living on such condemned land.

Question: How long have you been involved in the communities of Tudor Shaft?

Answer: For a quite a while now I am very passionate about the environment and I don't only work with this community but with many others to try and educate them on the dangers of pollution and radioactive land plus water with heavy metals. Where possible I also try and get compensation were possible and try to make the mining companies responsible for their actions.

Que: That sounds like a lot do how do you manage?

Ans: I have a lot of help there are a lot of volunteers who help with community work and I also have Sylvia full time but I agree its daunting work that someone has to do.

Que: With the awareness campaigns that you hold among poor communities do you think people understand what is happening with the environment in terms of pollution?

Ans: A lot of the community members speak quite intelligently and ask brilliant questions after they have been informed about the dangers of tailings dams and the

water which there are using. The workshops we have are very helpful as the community begins asking themselves what they can do to help themselves and their situation which are very relevant questions. I can see progress through the workshops we are having.

Que: Who do you think should take responsibility for cleaning up the environment?

Ans: That is a difficult question to ask because there is no one culprit to this mess. The mining companies who created these problems are probably out of the country by now enjoying their profits, the government which allowed this to happen is out of power and we have a new government in place. I don't think its fair to blame it all on the companies that are mining now or re-mining. The damage has been accumulating for over a hundred years. I think everyone, the government the mining companies and people in general should take responsibility for the environment everyone should contribute to make it a better place to live.

Que: So you think the government is doing enough?

Ans: Again another difficult question, I don't think there are doing enough but I also think there are not the enemy here I think there is a lack of capacity in the government, a lack of capacity in resources, money and expertise to deal with the problem. There is also a problem that there is no communication within the government departments, in a lateral and vertical level that is from local government to national government and across departments that is from the forestry department to the agricultural department to the water affairs and mining. So that communication is vital. Another problem is that government officials don't stay enough in one place to make difference. A person is in office for 5 years just before they start making progress they are transferred or another one is voted into office and the whole process has to start again.

Que: What about the mining houses do you think they accept any responsibility at all?

Ans: I think slowly some mining houses are beginning to accept responsibility but DRD Gold refuses to accept responsibility on so many levels its shocking. They refused to accept responsibility when the two children drowned in a tailings dam?

Que: How did that happen?

Ans: Two children from the community were playing near the dam and they somehow drowned in the polluted water they never stood a chance. I had repeatedly told them to fence the area and put warning signs but it all fell on deaf ears no one was willing to do anything.

Que: How did the local authorities react to this incident surely they put pressure on DRD?

Ans: Actually this is the surprising thing because before the local began building the RDP houses and had pegged the land I had repeatedly warned them not to use that land because it is highly radioactive and it also near the dumps with all the dust and things. But because it was near election time building he RDP houses was an election campaign tool. I was labelled as anti development and that I had put two snakes in the tailings dam that had caused the drowning of the children. People were even told to burn my car if they saw it. Fortunately this never happened it's sad though that people prey on the ignorance of others to get ahead.

Que: Do you think that the mine dumps therefore can be valued as heritage?

Ans: As there are I do not think so some of the uncovered ones are so fine in the grain particles people breathe in the particles without being even aware of it. I mean this stuff doesn't kill you immediately its long term and it affects people years after they have even moved to another area. So it should be avoided. If people really are concerned about heritage they should be concerned about the acid mine drainage that is damaging the dolomites of the Sterkfontein caves and putting that heritage at risk. Perhaps people should think more about the footprints of the dumps rather than the dumps themselves.

Que: What do you think should be done by the mining companies to warn people about the dangers that there are living with.

Ans: I think they should at least put up warning signs and fences to keep people away. In some places you find children playing barefooted in acidic water. In one place where the land is very radioactive and a mining house was busy re-mining for gold they had placed a guard outside and a big yellow sign warning of the radioactivity and I asked the guard what he was guarding. He said that he was guarding against people coming to steal the gold that was being re-mined. I asked him whether he knew what the big sign that said radioactive meant and he told me that his bosses had told him that his radio is active that's what it meant. I mean such blatant lies told to an employee. We explained to him what it meant and the next time we went there the sign had been removed and the guard was not there that's what they do when they are about to face scrutiny they cover up.

Que: Do you know where the waste material that is re-mined goes to.

Ans: Others just deposit it back right next to the one that was there. Mintails is trying to be environmentally responsible there are re-mining in Krugersdorp and there are putting the waste in air tight containers and putting it underground. This is however a temporary solution a more permanent solution has to be made. There is really a need for consultation so that more is done to make sure that the problem of pollution is solved.

Que: Where do you get the funding to do all the work that you do?

Ans: Ironically from some mining companies who see the workshops as part of their EMPs I also get funding from well wishers.

Que: What do you think should be done that will benefit everyone?

Ans: I think rehabilitation programs should be put in places which are labour intensive where people can be trained on what do and then at least people can be employed while cleaning up the environment. This is very possible but there seems to be no will among the authorities and the mining community to implement such programs.

8.5 Interview with Godfrey Makomene Meadowlands Soweto

January 2010

Interview with Godfrey Makomene a resident of Meadowlands January 2010 and also representative of 14 communities that are going against Central Rand Gold in the re-mining of old shafts. Although re-mining already started the communities have not been given the jobs there were promised therefore the hostility and the objections to re-mining.

Question: So you live in the Meadowlands area?

Answer: Yes, I have been living in Meadowlands all my life.

Que: How did you get involved with this fight with Central Rand Gold?

Ans: Well the fight started in 2007 November when CRG came to the communities of Meadowlands and told us that there were coming in to mine old shafts and create jobs for people. They were good on their promises but not all they started the mine but never created any jobs for anyone. We are still waiting for the jobs. So I am representing the communities and trying to stop the mining companies from mining if they don't want to create the jobs.

Que: Which communities do you represent?

Ans: Meadowlands (East and West), Orlando (Eat and West), Diepkloof, Riverlea, Bosmont, Maraisburg, Zampilo, Pennyville, City Deep and Vleiroof. The problem is that people are divided.

Que: How are they divided?

Ans: DRD has managed to give some of the people procurement deals so that they support their moves for their re-mining.

Que: You live near the mine dumps how that has affected you?

Ans: The dumps are affecting everyone who lives near them. During the dry season dust blows into our homes making everything dirty and making it impossible to even

walk or see in front of you. I think the dust is also causing a lot of diseases I met a girl the other day who grew up here in Meadowlands their house is right next to the dump, she so thin, she is sick coughing not TB just coughing and she says it's from all the dust that comes to their house, people are dying from this sand I think it's very sad that these tourists love them

Que: But as you have been living near the dumps for long there must be some fondness or appreciation that you feel for the beauty of the dumps.

Ans: Let me ask you something sister how do you appreciate something that poisons?

Que: What do people think about the mine dumps then?

Ans; If people were asked what they really want from the mine dumps they would say jobs because that what they want and need what would it help just to keep a mountain of sand if it cannot create jobs and that is the reason why Central Rand Gold has a lot of support from people in our community they want jobs and to put food on the table. One has to eat and the people are poor and we need to feed our families and the only way to do it is to work. People will work on the dumps without a blink, and destroy them if they have to get work.

Que: So do you think your fight will be successful?

Ans: I think so CRG has to realise that they cannot use us as they did with our forefathers if there are in a community and promise certain things that they do not deliver they have to deliver in their promise.

Que: How would like to see the mine dumps being used?

Ans: I think the only way to make people appreciate them is if there are properly rehabilitated and people get jobs as a result. Then maybe things can change maybe we will look at them they way that other people look at them the tourists and all at the moment I just want to win this fight I lost my business concentrating on this so I cant stop now.

8.6 Interview Lulama Nhlabathi Candidate Attorney Legal Resources Centre

January 2010

Question: How are you involved in the mine dumps and slime dams?

Answer: Well, I am a candidate attorney at the LRC and since I have been working there for a little over a year they have been involved in litigation with Xtrata in Belfast Mpumalangs where Xtrata has caused the pollution of the environment.

Que: So who is the LRC representing?

Ans: They were approached by a farmer who lives downstream who noticed that his livestock were being born with abnormalities. The farmer realised that his workers who also live downstream where experiencing adverse reactions from the water there were drinking some of the children were being born with abnormalities and a lot of the kids had tumours and cancers.

Que: But how do you prove that there is a link between those diseases and the cancers and tumours people are having what if something else has been causing it?

Ans: Well there is always a small chance that something else might be causing these diseases. But the farmer did his own water tests to see if his water and the water his workers are using are polluted and it is. There have been a lot of scientific studies done that show that there is a link between polluted water and diseases, miscarriages and abortions in animals.

Que: And why isn't the local government supplying these people with clean water?

Ans: That's the other thing, we are also suing the water department for issuing a water license to allow for settlement in the area there were not supposed to because the water is obviously not fit for human intake.

Que: How could that be possible, were tests not done?

Ans: These things are hard to trace people don't stay in offices for long, money changes hands and it is hard to track down who approved the water licence and the reasons for issuing it out if there were no proper tests done.

Que: Are the communities aware that their water is unsafe?

Ans: Now some are, but before, probably not. Even now there is lack of education and knowledge on the part of the communities about where their problems are originating from. Most believe the people suffering from the diseases are HIV positive some think there are just normal illnesses there is a real problem of awareness that needs to be tackled.

Que: So what are they suing for?

There are suing for monetary compensation for the loss in livelihood and the damage done to their health.

Que: When do you think they will get their ruling?

Ans: The litigation started in 2006 and has been dragging on the tribunal kept postponing the issue until we decided to go to the high court so that where we are at. But these things take a lot of time and one has to be patient.

Que: Are the mining companies cooperative are they trying to make things better?

Ans: Not at all, but then this is a legal battle one that will cost them millions if they lose so they cannot be expected to be cordial. There are quite uncooperative and the farmer had to do his own tests because they did not want them done in their labs.

Que: What do you hope for the communities?

Ans: I hope they get the compensation they deserve for all their pain one cannot pay enough for damaged health but I hope that this will give them some sort of closure. I also hope that this will create awareness of what mining can do to people if proper environmental measures are not taken into consideration.