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Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery: Mooikraal Environmental Management Programme Report, Sasolburg, Free State

Social Baseline Profile

Project Number:

SAS5175

Prepared for:

Sasol Mining (Pty) Ltd

November 2018

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Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

TABLE OF CONTENTS

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

LIST OF FIGURES

LIST OF TABLES

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

1 Introduction

The Sasol Mining (Pty) Ltd (Sasol Mining), Sigma Colliery, Mooikraal consists of two components, the operational shaft "Mooikraal" (hereafter referred to as Mooikraal) and the coal handling facility "3 Shaft Complex" (hereafter referred to as 3 Shaft).

Mooikraal is an operational underground coal mine located near Sasolburg. It currently operates under a consolidated Mining Right (Reference No. FS 30/5/1/2/2/2/1/221) and approved amended Environmental Management Programme (EMP) (Reference No. 30/5/1/2/3/2/1 (221) EM) granted in April 2016. The authorisation permits the undertaking of various activities associated with the underground coal mining operation.

Mooikraal also holds a separate approved Environmental Authorisation (EA) (Reference No. EMB/28/14/43 dated 09 March 2015) for 10 and 7 Ml/day (Ml/day) water transfer pipelines. The 7 Ml/day pipeline authorises the transport of water from the Kleinvlei Ventilation Shaft and the 10 Ml/day pipeline is authorised to transport water from the Mooikraal Pollution Control Dam (PCD) to the Sasolburg Operations.

Mooikraal is now proposing to reconfigure and relocate the conveyer belt series and existing crusher facility currently located at the 3 Shaft primary plant area. In addition Mooikraal also wishes to amend and consolidate the approved Mooikraal EMPr to include all activities and properties associated with the proposed operations. An environmental regulatory process is thus required to obtain the necessary EA and associated approvals.

Through this environmental authorisation process, it is intended that the following will be undertaken:

- Listed Activities now triggered in terms of the Environmental Impact Assessment (EIA) Regulations 2014 (as amended) (Government Notice No. R. 982 of 4 December 2014 as amended by Government Notice No. R.326 of 7 April 2017) referred to hereinafter as the EIA regulations, 2014 (as amended) promulgated under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) will be applied for; and

- Incorporate all activities at the Mooikraal and 3 Shaft operations into an amended EMPr so as to ensure that all activities are lawfully executed.

*This report is limited to an updated baseline profile for the surrounding socio-economic environment. It does not include a detailed impact assessment or any mitigation measures.

1.1 Project Description

Mooikraal is located approximately 18 kilometres (km) from the Sigma Defunct Colliery and 18 km southwest of Sasolburg in the Fezile Dabi District Municipality, Free State Province. The mine began operation in 2005 and has a Life of Mine (LoM) of 34 years until 2039.

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

Mooikraal is extracting coal utilising the underground bord and pillar mining method, however in some areas high extraction mining is taking place. The coal is transported via a conveyor belt underground and brought to surface via an incline/ decline shaft which is also used to enter the mine. The coal is then stored in a silo. Subsequently the coal is conveyed via an 18 km conveyor belt (MK3 – KM8 Belt) from Mooikraal to 3 Shaft where the coal is crushed, screened and then stockpiled before it is transported to Sasolburg Operations for further use.

The following infrastructure is currently present at Mooikraal:

- Incline shaft, coal silo and emergency coal throw out area;

- Ventilation Shaft (Kleinvlei Shaft and various downcasts);

- PCDs;

- Three sumps (wash bay, fuel storage, shaft);

- Clean and dirty water channels;

- Explosive magazine;

- Material and equipment storage area;

- Soil stockpiles;

- Waste Rock Dump (WRD);

- Sewage Treatment Plant (STP);

- Waste storage area / ISO Yard;

- Workshops, warehouses and wash bay;

- Bulk fuel and oil storage area;

- Chemical storage area;

- Electricity supply structures including pylons, transformers and bunds, cabling;

- Boreholes (rescue and water monitoring);

- Access roads;

- Box-cut material storage area;

- Dust suppression storage area and bund;

- Borrow pits;

- Coal conveyor belt and associated infrastructure such as transfer stations;

- 10 Ml pipeline from Mooikraal to Sasolburg Operations;

- 7 Ml pipeline from Kleinvlei Shaft to Sasolburg Operations; and

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

■ Administration buildings and change houses.

The following infrastructure is present at 3 Shaft:

■ Primary plant area (including a crusher facility), stockpile area (including stacker reclaimer for Run of Mine (ROM) and imported coal)

■ 4 Shaft coal bunker;

■ Coal conveyor belt;

■ Haul roads for imported coal truck transport ;

■ Bulk fuel and oil storage area and workshops;

■ Waste storage area;

■ Weighbridge;

■ Contractors storage yard;

■ Workshops (diesel and boiler);

■ Chemical storage area;

■ Administration buildings and change houses;

■ Pipelines;

■ Dirty water storage dam; and

■ Old dams currently not in use and proposed to be demolished.

The following activities are proposed to be undertaken as part of this project:

■ Demolition of the existing conveyor belt, crushing facility and coal bunker which is currently situated within a wetland at the 3 Shaft (primary plant);

■ Relocation/reconstruction the primary plant (crusher facility) to the concreted stockpile area (to remain within the 3 Shaft footprint);

■ Installing a conveyor belt from the MK8 transfer point to the stockpile area which will traverse a delineated wetland (within the 3 Shaft footprint);

■ Proposed upgrade of the storm water management system at 3 Shaft;

■ Rehabilitation of the existing wetland at 3 Shaft;

■ Drilling of exploration, monitoring and rescue boreholes within the approved Mooikraal Mining Right area and 3 Shaft;

■ Incorporate all activities at Mooikraal, Kleinvlei, 3 Shaft and along both servitudes into the EMPr;

■ Incorporate the 7 and 10 Ml/day pipeline EA into the EMPr; and

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

■ Incorporate all properties located within Mooikraal, Kleinvlei, 3 Shaft and along both servitudes into the EMPr.

2   Methodology

The activities undertaken as part of the compilation of this baseline profile are outlined below.

2.1   Definition of the study areas

Study areas were defined based on the type of risks and impacts each area is expected to experience as a result of the proposed project. The social risks and impacts of a project can be divided into three broad categories, as follows:

■ Impacts related to the ***physical intrusion*** of project infrastructure and ***project-related activities*** on the surrounding environment;

■ Impacts related to the ***economic pull*** of a Project, which occurs when a Project exerts changes on job creation, in-migration of workers and job-seekers, multiplier effects in the local and regional economy – all of which can lead to an increased risk of social pathologies and community conflict. These impacts can typically be expected in settlements and towns closest to the Project; and

■ ***Indirect*** or ***induced*** risks and impacts that are by-products or ripple-effects of the risks and impacts in the foregoing two categories. These could include increased pressure on local services and resources (as a result of population influx), multiplier effects in the local and regional economy (as a result of the creation of new jobs and project-related expenditure), macroeconomic benefits of the project and benefits derived from corporate social investment by the project proponent.

Accordingly, three concentric study areas were defined for the purposes of this study, corresponding to the three categories of impacts listed above. The study areas are as follows:

■ The ***regional study area*** – the area likely to experience the indirect or induced impacts of the project. This area is defined as the Fezile Dabi District Municipality (FDDM), the Ngwathe Local Municipality (NLM) and Metsimaholo Local Municipality (MLM).

■ The ***local study area*** – the area likely to experience impacts related to the "economic pull" exerted by the project. This area is defined as the areas adjacent to project infrastructure, namely (a) Sasolburg, located directly adjacent the site-specific study area and made up of Metsimaholo Wards 15, 16 and 17, and (b) Zamdela, a lower-income residential area just south of Sasolburg, made up of Metsimaholo Wards 2, 6, 8, 9, 10, 12, 13 and 21 (Wards 7 and 19 have been excluded – the former is mostly made up of an industrial zone, while the latter consists mostly of

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

agricultural land. The inclusion of these wards would skew the residential data for the other wards by, for example, enlarging the geographical area).

■ The *site-specific study area* – the area likely to experience impacts related to the physical intrusion by project infrastructure and project-related activities. This study area is defined as the municipal wards in which the proposed project infrastructure is located, namely Ngwathe Ward 7 and Metsimaholo Wards 1, 11 and 14.

2.2 Data collection

The information presented in this document was obtained through a *desktop review* of available documents to obtain relevant baseline socio-economic information on the different study areas. Documents reviewed include the following:

■ Integrated Development Plans (IDPs) of the local and district municipalities;

■ Census 2011 data, reworked according to the new 2016 municipal ward boundary delineations;

■ Community Survey 2016 data;

■ Previous reports concerning the same project area, specifically the Social Assessment for the proposed Sigma Colliery Ash Backfilling Project completed by Digby Wells in 2013; and

■ Available maps and satellite imagery.

2.3 Compilation of a socio-economic baseline profile

On the basis of the information collected through the desktop review, a socio-economic baseline profile was compiled of the study areas defined in Section 2.1. Topics considered as part of this profile include the following:

■ Population size, growth rate and migration;

■ Demographic characteristics;

■ Education;

■ Employment and income; and

■ Access to services.

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

3 Socio-Economic Baseline Profile

3.1 Regional study area

3 Shaft and large parts of the conveyor belt are located in the MLM, whereas Mooikraal and a small portion of the conveyor belt are located in the NLM. Both these municipalities form part of the FDDM.

3.1.1 Fezile Dabi District Municipality

The FDDM is one of five district municipalities in the Free State Province; its neighbouring municipalities include Sedibeng (Gauteng), Gert Sibande (Mpumalanga), Dr Kenneth Kaunda (North West), Lejweleputswa (Free State) and Thabo Mofutsanyane (Free State). Fezile Dabi covers an area of about 20 900 km^2 and has a population of approximately 500 000 people (just less than a fifth of the Free State province's total population) resident in 38 different settlements, four of which are farming settlements, 15 formal urban towns, 17 urban townships and two informal urban settlements.

The FDDM is not only home to the Sasol Ltd. group, but also produces a large percentage of South Africa's grain crops including maize, wheat and sunflowers. This area's climate is ideal for cultivation and supports its rich biodiversity. The district municipality is a major tourist destination as it plays host to South Africa's 7th World Heritage Site, the Vredefort Dome, the world's largest and oldest meteorite crater. It also boasts with an array of nature reserves and the Vaal Dam, which is a main source of water (FDDM IDP, 2017-2022).

The FDDM consists of four local category B municipalities namely Moqhaka, Ngwathe, Metsimaholo and Mafube. As previously indicated, parts of the Project is located along the outskirts of Sasolburg in the MLM, the smallest local municipality in the FDDM.

3.1.2 Metsimaholo Local Municipality

The MLM is located in the north-eastern quadrant of the FDDM and at 1 720 km^2, is the smallest geographical area of the district. In 2016, it was home to 163 564 people – a slight increase over 2011's population of 149 107 people (this represents an average increase of around 2 900 people per annum, or an annual population growth rate of approximately 1.9%). The population density is fairly low at 86.7 people per km^2, which is typical of a rural area (although it can be expected that the population density will be higher in towns, such as Sasolburg). Based on the calculated population growth rate of 1.9% per annum, the 2018 population size is an estimated 169 779 people.

Sasolburg is the most prominent contributor to the local municipality's economy and is the only town in the district where the private sector dominates the public sector, due to the predominant contribution Sasol makes to the chemical industry. As this town is located in the heart of worldly renowned coalfield, the Vereeniging-Sasolburg Coalfield, the economy is

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

also supported by the manufacturing of a vast range of by-products, namely fuels, olefins, waxes, alcohols, tar products, inorganic chemicals, rubber, gases, plastics, fertilizers, etc.

Migration into the municipality is focused towards Sasolburg, Deneysville and Oranjeville (including their lower income residential areas) - presumably due to the existing mining activities and the proximity of these areas to retail, factory, and industrial work opportunities. The migrant population consist of mostly unemployed job-seekers from rural areas in the MLM and neighbouring municipalities. People are also moving from smaller towns in the district into Sasolburg.[1]

Coalfields are regarded as the dominant economic potential for the Sasolburg and Zamdela area, whereas agriculture is more dominant in the Oranjeville/Metsimaholo and rural areas of the municipality (MLM IDP, 2016/17).

3.1.3 Ngwathe Local Municipality

The NLM is situated in the northern part of the FDDM. It covers a geographical area of 7 066 km^2 and in 2016, was home to 118 906 people. This represents a negative population growth rate of around -0.3% per annum from the population size recorded in the 2011 Census, which was 120 521 people. If this negative population growth rate continued, the current day (2018) population size would be an estimated 118 193 people.

The NLM is largely rural in nature, which is evident in the population density of around 17 people per km^2. Major towns in the NLM include Parys, Heilbron, Koppies, Vredefort and Edenville.

Parys is located some 27 km west of the Mooikraal colliery and is the closest town within the NLM to any of the Project infrastructure. Parys is located on the banks of the Vaal Rivier, in close proximity to the Vredefort Dome World Heritage site, Gauteng (Johannesburg) and the Northwest (Potchefstroom), which makes it an ideal tourist destination.

The local economy of the NLM have grown at roughly the same rate of the province, at around 3.2% per annum. Key sectors within the NLM include trade and catering, finance and business services, manufacturing, construction, government services and transport. The economic sectors employing the largest number of people are trade and catering, community services, agriculture, government and construction services (NLM IDP, 2017-2022). People in general are still fairly disconnected from economic opportunities – this is due to the geographic layout of the municipality and the subsequent lack of transport.

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[1] Metsimaholo Local Municipality. (2012). Spatial Development Framework: 2012 / 2013 (newer SDF not yet available).

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

3.2   Local Study Area

As mentioned previously, the local study area is defined as Sasolburg (MLM Wards 15, 16 and 17)[2], and Zamdela (MLM Wards 2, 8, 9, 10, and 12) - see Figure 3-1 for an overview of the local study area. The wards have been combined for each area (i.e. Sasolburg and Zamdela) in the discussions that follow, to give an integrated overview of the area.

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[2] MLM Ward 7 has been excluded from the baseline profile as it is an industrial zone – the inclusion of this ward data could skew the residential data of the other wards.
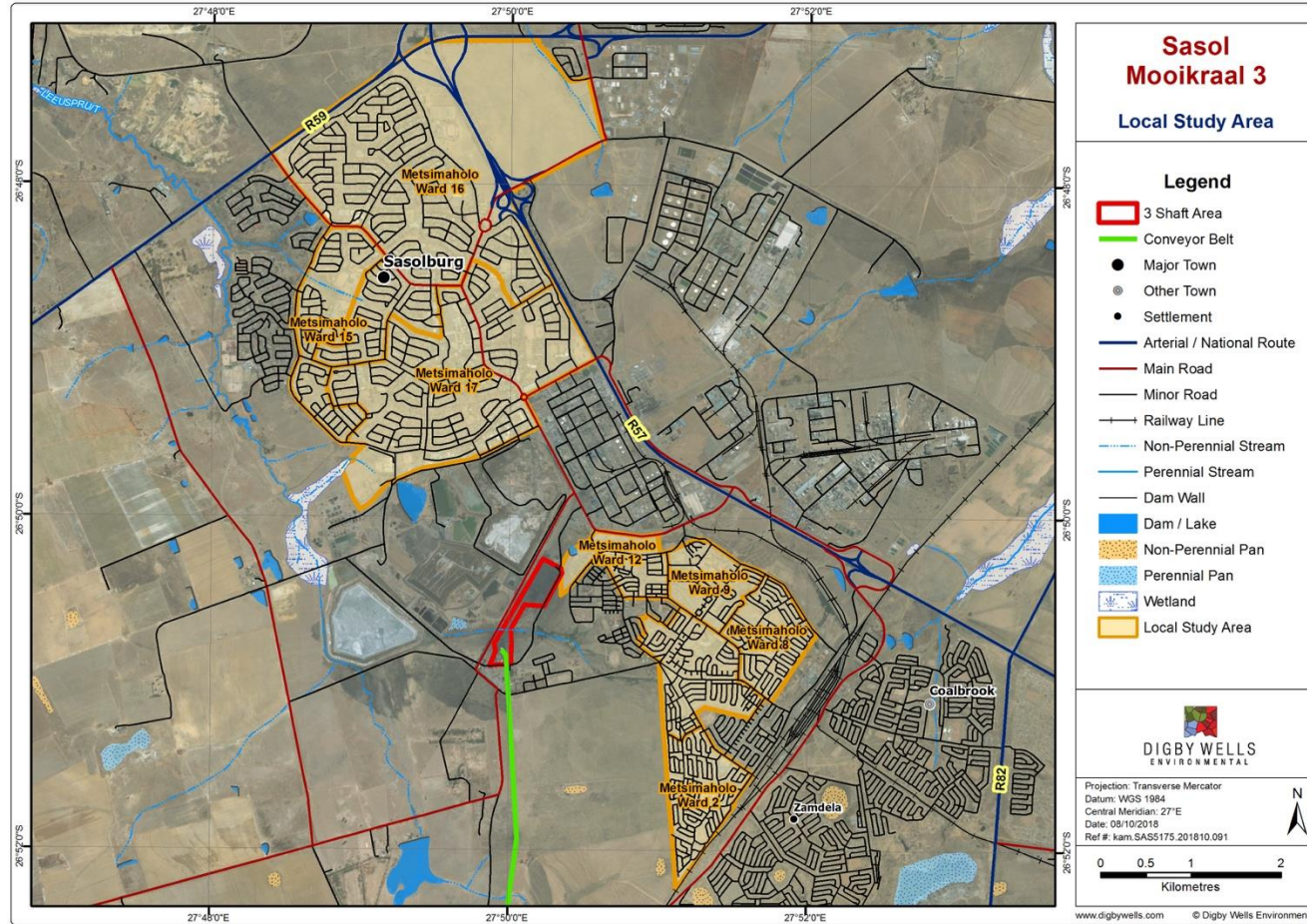
Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery: Mooikraal Environmental Management Programme
Report, Sasolburg, Free State

SAS5175

Figure 3-1: Overview of local study area

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

DIGBY WELLS
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3.2.1 Population size, growth rate and migration

As mentioned above, the MLM has a total population of approximately 163 500 individuals divided into just over 59 100 households. About 18% of the local municipality's population are resident in the informal settlement of Zamdela. This settlement is located close to the employment opportunities offered in both Sasolburg and other areas in the Gauteng Province (such as Vereeniging and Vanderbjilpark). An additional 11% of the MLM's population resides in Sasolburg (see Table 3-1).

Table 3-1: Population size and distribution in the local study area

Area	Total population (individuals)			
	2001	2011	2016	2018 (est.)
MLM		149 107	163,564	169 910
Sasolburg (Wards 15, 16 and 17)	15 141	17 870	-	20 179
Zamdela (Wards 2, 8, 9, 10 and 12)	29 772	30 068	-	30 278

Source: Census 2011 data in Wazimap

Sasolburg experienced a growth rate of around 1.8% per annum, which is more or less on par with the overall growth rate of the MLM (estimated at 1.94% per annum). Zamdela experienced a much slower average growth rate of 0.1% per annum, which would suggest that there is no large-scale population in-migration occurring in Zamdela. The detailed (ward-level) population growth rate and estimate population size for 2018 is reflected in Table 3-2.

Table 3-2: Population size and distribution per ward in the local study area

Area	Total population (individuals)			
	2001	2011	Growth rate pa (%)	2018 (est.)
Sasolburg				
Ward 15	3 654	2 721	-2.6%	2 244
Ward 16	5 496	7 314	3.3%	9 082
Ward 17	5 991	7 835	3.1%	9 610
TOTAL	*15 141*	*17 870*	-	*20 936*
Zamdela				
Ward 2	6 756	6 617	-0.2%	6 524
Ward 8	6 717	6 677	-0.06%	6 649
Ward 9	4 620	5 623	2.2%	8 169
Ward 10	7 902	7 079	-1.0%	6 583
Ward 12	3 777	4 072	0.8%	4 300
TOTAL	*29 772*	*30 068*	*-*	*32 225*

Source: Census 2011 data in Wazimap

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

3.2.2 Demographic characteristics

Of the total population, 71.5% are economically active (i.e. aged between 15 and 64). There is an almost equal split between males and females in both areas, with males in the slight majority in Sasolburg (50.3%) and in Zamdela (51.7%).

Close on two thirds (61.4%) of the Sasolburg population is White, with the remaining third (36.2%) being Black African. The population in Zamdela is almost exclusively Black African (99.6%). The population group distribution for the local study area is reflected in Table 3-3.

Table 3-3: Population group distribution in the local study area

Population group	MLM	Sasolburg	Zamdela
Black African	82%	36.2%	99.6%
Coloured	0.8%	1.8%	0.2%
Indian or Asian	0.3%	0.5%	0.1%
White	16.9%	61.4%	0%
Other	0%	0.2%	0.1%
Total	**100%**	**100%**	**100%**

Source: Census 2011 data in Wazimap

Just over half of the population (59%) in Sasolburg are Afrikaans speaking, followed by Sesotho (21.3%). Most of the population in Zamdela (67.3%) speak Sesotho, followed by isiXhosa and isiZulu.

3.2.3 Education

The highest level of education for individuals above the age of 18 is shown in Figure 3-2. This figure shows that individuals resident in Sasolburg are better educated than those in Zamdela, where only 35.7% of individuals have either completed their secondary or tertiary education (compared to 61.7% in Sasolburg). The proportion of the population with either no schooling (5.1%), or only some primary schooling (14.5%) is also much higher in Zamdela than in Sasolburg (0.8% no schooling and 1.6% some primary).

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175
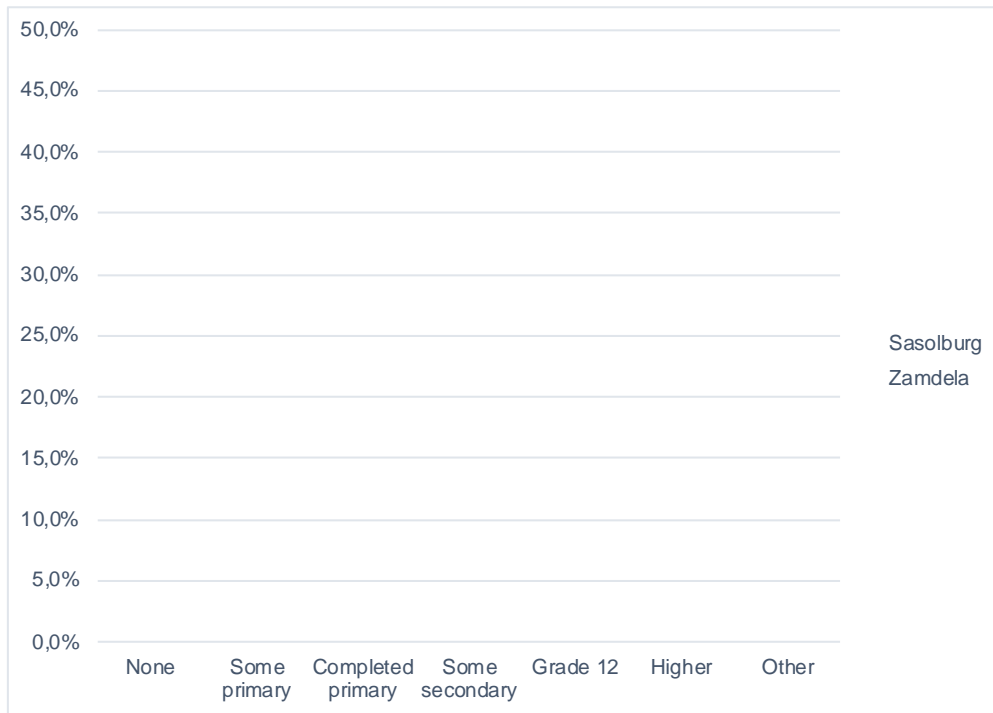
Source: Census 2011 data in Wazimap

Figure 3-2: Education profile of the local study area

3.2.4 Employment and income

An overview of the employment profile for the local study area is shown in Figure 3-3. In both Sasolburg and Zamdela, a third of the population (32.6% in Sasolburg and 32.2% in Zamdela) are not economically active (i.e. either aged younger than 15 or older than 65). Just over half (57.2%) of the total population in Sasolburg are employed, with only 40% of the Zamdela population employed. A quarter (25.9%) of Zamdela's total population are unemployed.

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175
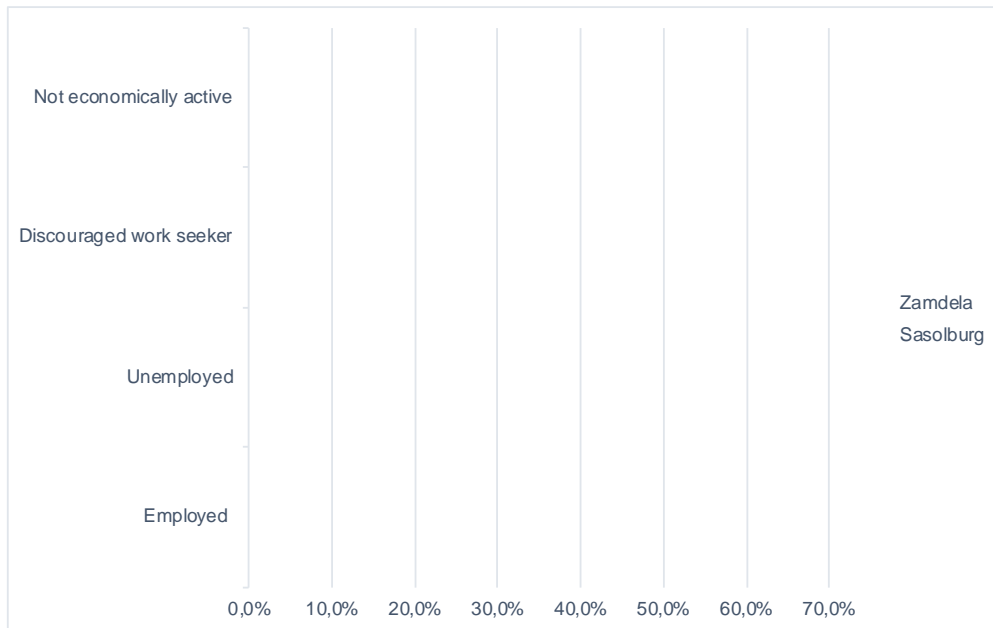
Figure 3-3: Employment profile of the local study area

Source: Census 2011 data in Wazimap

Linked to the employment profile, is the annual household income profile, reflected in Figure 3-4. From this graph it is evident that the majority of households in Sasolburg (58.9%) fall within the middle income bracket (defined as an annual household income of between R 76 801 and R 307 200 for a family of four, whereas the majority of households in Zamdela live in absolute poverty (between R0 and R 19 200 for a family of four) (42.5%) or within the lower middle income bracket (between R 19 201 and R 76 800) (37.4%).

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

Figure 3-4: Annual household income profile of the local study area

Source: Census 2011 data in Wazimap

3.2.5 Access to services

Almost all the households (99.8%) resident in Sasolburg live in formal dwellings, and have access to electricity, a flush toilet, a refuse removal service and piped-water from a water scheme operated by the municipality or another water services provider.

As a lower-income residential area, it is not surprising that service provision is poorer in Zamdela than Sasolburg. More than 90% of households resident in Zamdela have access to electricity, refuse removal and piped water; however, there are more informal housing in Zamdela (approximately 10% of dwellings) than Sasolburg.

Figure 3-5 provides an overview of the municipal services in the local study area.
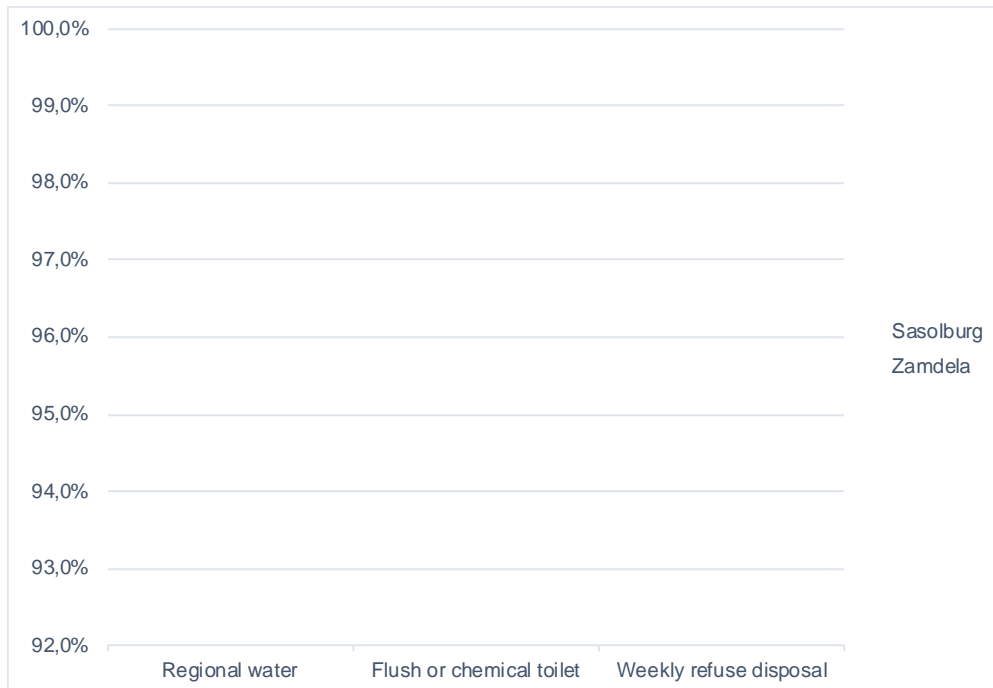
Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

Figure 3-5: Overview of services in the local study area

Source: Census 2011 data in Wazimap

In Zamdela, there is an estimated need for about 15 000 houses. Both Sasolburg and Zamdela are currently constrained for future growth by the undermined areas and by future mining prospecting opportunities located in and around the town. In response to the housing provision backlog, many people often are drawn to settle illegally on private or public property and provide themselves with inadequate, informal and illegal housing in informal or illegal settlements.

3.3   Site-specific study area

As mentioned previously, the site-specific study area is the area likely to experience impacts related to the physical intrusion by project infrastructure and project-related activities. This study area is defined as the municipal wards in which the proposed project infrastructure is located, namely Ngwathe Ward 7 and Metsimaholo Wards 1, 11 and 14 and is shown in Figure 3-6.

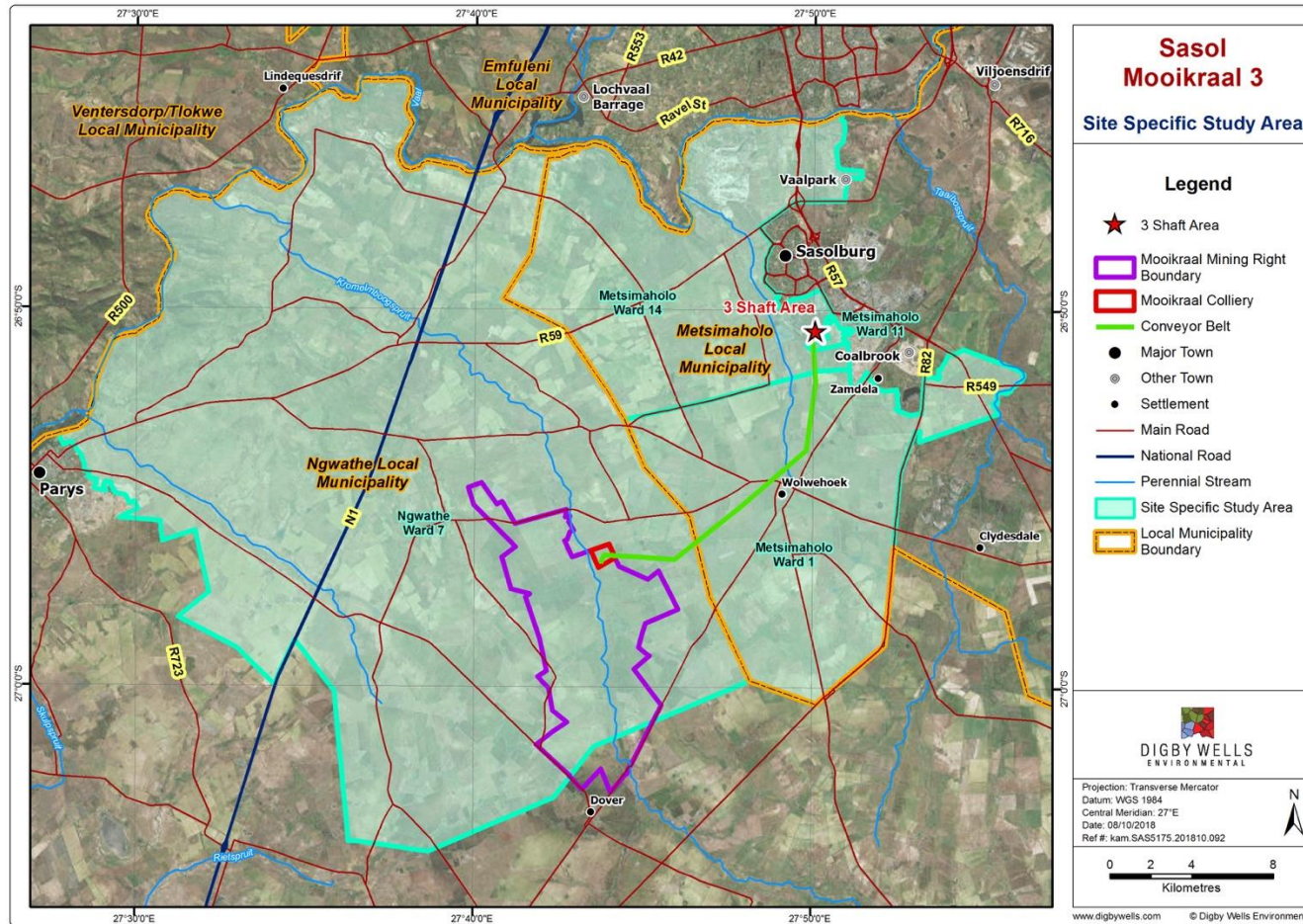Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery: Mooikraal Environmental Management Programme
Report, Sasolburg, Free State

SAS5175

Figure 3-6: Overview of site-specific study area

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma
Colliery: Mooikraal Environmental Management Programme Report, Sasolburg, Free
State

SAS5175

3.3.1 Population size, growth rate and migration

The detailed (ward-level) population growth rate and estimate population size for 2018 for
the site-specific study area is reflected in Table 3-4.

Table 3-4: Population size and distribution per ward in the site-specific study area

Area	Total population (individuals)			
	2001	2011	Growth rate pa (%)	2018 (est.)
MLM Ward 1	5 915	17 558	19.7	41 770
MLM Ward 11	5 073	5 110	0.07	5 135
MLM Ward 14	8 598	9 119	0.6	9 501
Ngwathe Ward 7	6 231	10 108	6.2	14 495
TOTAL	*25 821*	*41 895*	*-*	*70 901*

Source: Census 2011 data in Wazimap

The population in MLM Ward 1 more than doubled between 2001 and 2011, giving it an
annual population growth rate of 19.7%. Compared to the other wards in the site-specific
study area, this is exceptionally high. To account for this rapid population growth in this
ward, it has to be assumed that multiple wards were amalgamated between the two
censuses, resulting in such a high population count. The 2018 estimate for this ward should
therefore be read with caution as it is likely not a true reflection of the current population
size.

3.3.2 Demographic characteristics

Of the total population, just under two thirds (64.9%) are economically active. As was the
case for the local study area, there is an almost equal split between males and females, with
males in the slight majority at 50.7%.

The majority of the site-specific study area is Black African (77.4%), followed by White
(21.0%). The population group distribution for the local study area is reflected in Table 3-3.

Table 3-5: Population group distribution in the site-specific study area

Population group	MLM	MLM Ward 1	MLM Ward 11	MLM Ward 14	Ngwathe Ward 7
Black African	82%	99.1%	99.5%	20.1%	90.8%
Coloured	0.8%	0.4%	0.1%	1.5%	0.9%
Indian or Asian	0.3%	0.1%	0.0%	1.6%	0.4%
White	16.9%	0.3%	0.1%	76.3%	7.3%
Other	0%	0.2%	0.7%	0.1%	0.3%

Source: Census 2011 data in Wazimap

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma
Colliery: Mooikraal Environmental Management Programme Report, Sasolburg, Free
State

SAS5175

Just over half of the population (54.2%) in the study area speak Sesotho – the exception being Ward 14 where the majority (70.7%) are Afrikaans speaking.

3.3.3 Education

The highest level of education for individuals above the age of 18 in the site-specific study area is shown in Figure 3-7. Most of the residents of MLM Ward 14 completed Matric (47.8%) with close on a quarter (22.9%) who completed tertiary education. Ngwathe Ward 7 has the highest percentage of individuals who had no schooling. On average, just over a third (34.6%) of the study area completed Grade 12.
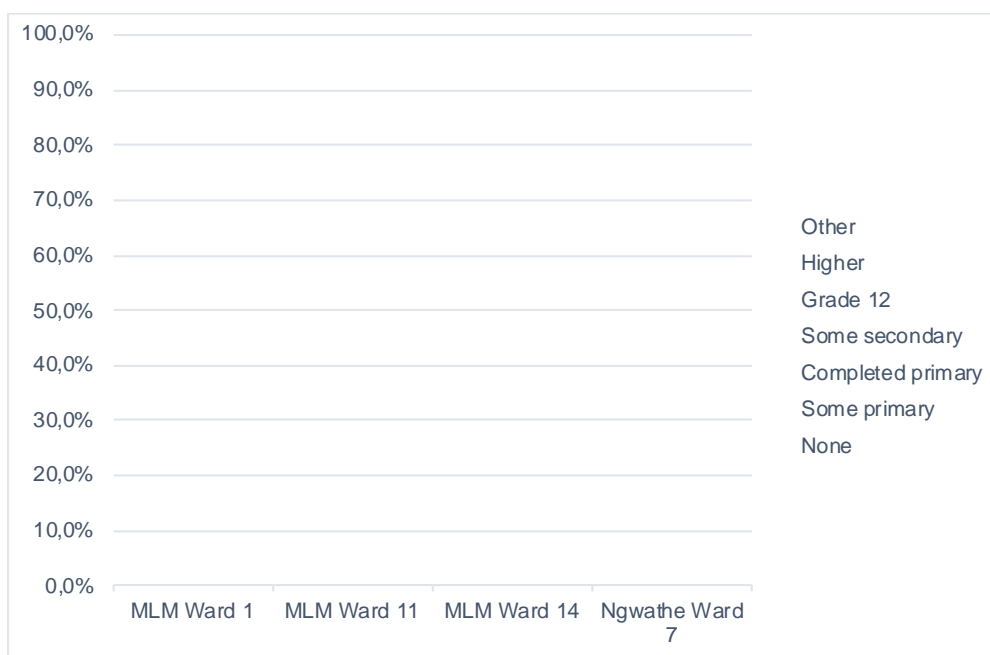

Figure 3-7: Education profile of the site-specific study area

Source: Census 2011 data in Wazimap

3.3.4 Employment and income

An overview of the employment profile for the site-specific study area is shown in Figure 3-8. MLM Ward 14 has the highest employment rate (67.5%) compared to the other three wards that have an average employment rate of around 41.5%. MLM Ward 14 also has a much lower unemployment rate when compared to the other three wards: 3.6% vs an average of 22.5%. Ngwathe Ward 7 has the highest number of discouraged work seekers at 8.3%, followed by MLM Ward 11 with 6% and MLM Ward with 4.2%.

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma
Colliery: Mooikraal Environmental Management Programme Report, Sasolburg, Free
State

SAS5175

Figure 3-8: Employment profile of the site-specific study area

Source: Census 2011 data in Wazimap

The annual household income profile of the site-specific study area is shown in Figure 3-9. From this figure it is evident that MLM Ward 14 is predominantly a middle income area (58.3% of households) and also has the highest percentage of households in the higher middle income (10.7%) and high income (1.0%) brackets. More than half of the households in MLM Ward 1 (56.8%) and Ngwathe Ward 7 (56.2%) live in absolute poverty, followed by a large percentage of households in the lower middle income bracket (an average of 34.8%). The same holds true for MLM Ward 11, although it has a far lower percentage of households living in absolute poverty (27.2%) and more households in the lower middle income (46.2%) and middle income (26.5%) brackets.
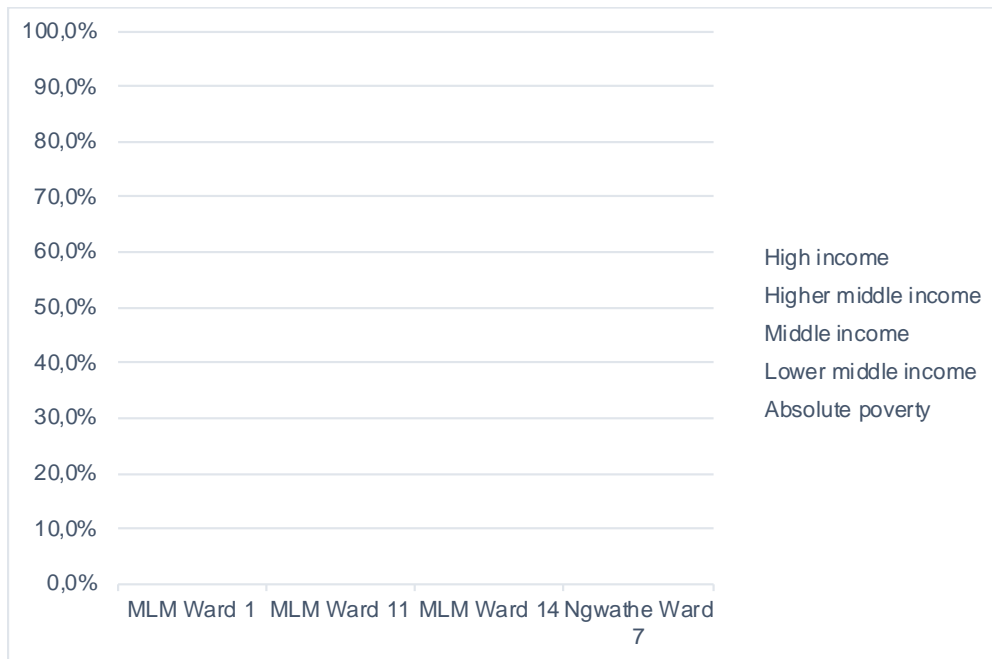
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Environmental Regulatory Process Required to Amend and Consolidate the Sigma
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Figure 3-9: Annual household income profile of the site-specific study area

Source: Census 2011 data in Wazimap

3.3.5 Access to services

On average, just over a third (35.1%) of households in MLM Ward 1 and Ngwathe Ward 7 live in informal housing. This is in sharp contrast to MLM Wards 11 and 14, where the majority (98.3% on average) are living in formal housing. The housing profile corresponds with the household income profile discussed above – both MLM Ward 1 and Ngwathe Ward 7's households are predominantly living in absolute poverty so it would follow that these two wards would have a large percentage of informal dwellings.

Figure 3-10 provides an overview of the municipal services in the site-specific area. The majority of households in MLM Wards 11 and 14 (99.6% in Ward 11 and 93.8% in Ward 14) have access to municipal services – this includes piped water supplied by a local water scheme, weekly refuse disposal and access to a flush or chemical toilet (i.e. a sanitation service at at least RDP level). Although most of MLM Ward 1's households have access to piped water, very few have access to RDP sanitation services (only 4.5%) or weekly refuse disposal (9.8%).
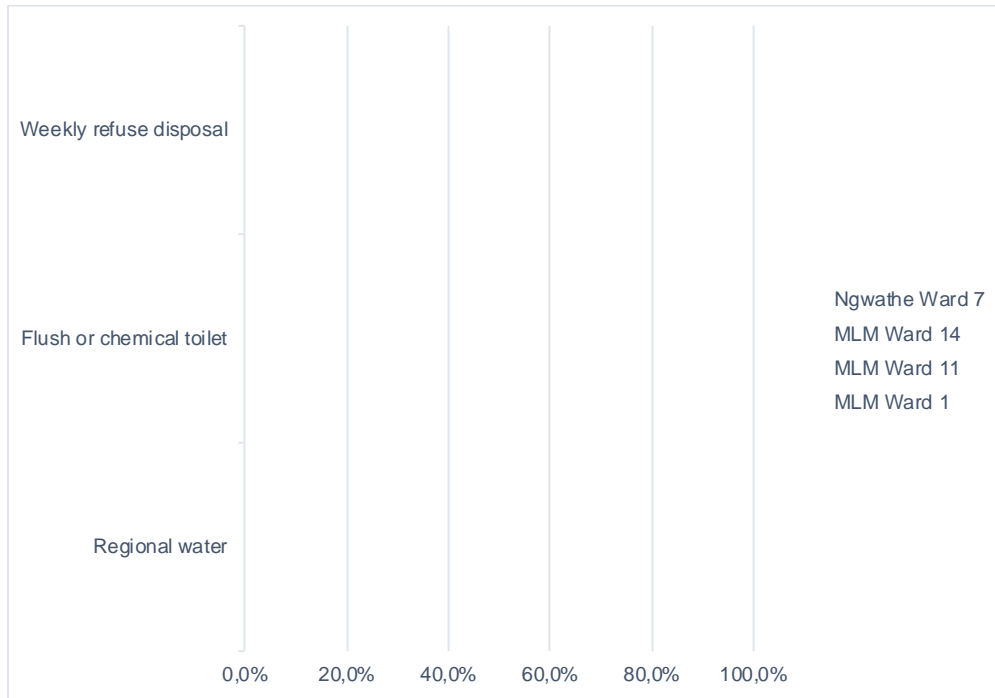
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Environmental Regulatory Process Required to Amend and Consolidate the Sigma
Colliery: Mooikraal Environmental Management Programme Report, Sasolburg, Free
State

SAS5175

Figure 3-10: Overview of municipal services in the site-specific study area

Source: Census 2011 data in Wazimap

4   Conclusions

Table 4-1 provides a summary of the baseline profile of the study area in which Shaft 3, the Mooikraal colliery and the conveyor belt servitude is located. It highlights features and trends within the respective study areas that may have relevance for Sasol in terms of possible opportunities/benefits and constraints/challenges.

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery: Mooikraal Environmental Management Programme
Report, Sasolburg, Free State

SAS5175

Table 4-1: Summary of the socio-economic baseline profile

Socio-economic attribute	Supporting data	Relevance to the project
Opportunities and benefits		
District and local municipal development plans are in place.	Local and district municipal Integrated Development Plans (IDPs), Local Economic Development (LED) plans, and Spatial Development Frameworks (SDFs).	Opportunity for the project to align future socio-economic development programmes or Social and Labour Plans (SLPs) with existing municipal development plans; this will increase sustainability and relevance of initiatives.
Large potential labour force.	The economically active group comprises the largest age cohort in the study area; high unemployment, especially among rural households; although most people have a relatively low skill level.	Local employment should be a priority.
General backlog of basic service delivery infrastructure (water, sanitation, electricity and tarred roads) in rural areas.	Stats 2011 and 2016 and MLM IDP: - Rural households within the local study area mostly rely on community standpipes and pit toilets; and - Considerable housing backlogs.	Provides opportunities to continue contribution to infrastructure development as part of drive towards LED (but may also hinder the productivity of the local workforce).
High levels of inequality and poverty within rural areas and townships.	StatsSA, 2013 and LM and DM IDPs: - High unemployment rate combined with low levels of income throughout the study area.	Local procurement and job creation will have a major positive effect on local businesses their employees and dependants, as well as on successful job-applicants and their dependants.
Constraints or challenges		

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery: Mooikraal Environmental Management Programme
Report, Sasolburg, Free State

SAS5175

Socio-economic attribute	Supporting data	Relevance to the project
Substantial housing shortage in the local study area (MLM specifically).	Stats, 2013, and DM and LM IDPs: Growth in the percentage of informal settlements in both urban and rural areas.	Any project-induced influx may place additional pressure on limited housing.

Social Baseline Profile

Environmental Regulatory Process Required to Amend and Consolidate the Sigma Colliery:
Mooikraal Environmental Management Programme Report, Sasolburg, Free State

SAS5175

5   References

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