



AFRIFORUM BRANCH PROJECT REPORT

ON THE MUNICIPAL LANDFILL SITE AUDIT FOR

2018



By

Project Manager: Chris Boshoff

Reviewed: Marcus Pawson

This document is part of AfriForum's landfill site audit project, a project of AfriForum's #cleanSA initiative, launched by

**Community Affairs
Environmental Affairs**

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A WORD OF THANKS

Thank you to AfriForum's staff and all the AfriForum branches across South Africa who have made this project possible.

Thank you to every individual member of AfriForum for your participation in this national project, and for sharing the vision of sustainable development and responsible waste management in South Africa with us.

Thank you also to every municipality that provides guidance in South Africa, does their work immaculately by ensuring that waste is managed in a responsible manner and therefore complies with

appropriate legislation and licences for managing waste. These municipalities should be rewarded for protecting their communities and the environment against pollution and hazards.

Thank you to the Waste Management Division of the Department of Environmental Affairs and the Gauteng Department of Agriculture and Rural Development who support the project, assist with the compilation of the new landfill site audit list and make their provincial task team available to participate in branch audits.

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INTRODUCTION

The civil rights organisation AfriForum launched the #cleanSA initiative in May 2014. This project strives to make a positive change in the management of waste across South Africa, to hold the officials involved accountable and to create cooperation between communities and the three spheres of government, namely national (the Department of Environmental Affairs), provincial (the respective provincial departments) and local (local municipalities). From a waste management perspective, the latter is the most important and closest level of government to communities. Lastly, we want to equip communities with solution-driven approaches as well. We also introduce the latest technologies and processes for dealing with the growing waste issue and for processing waste through better recycling and less pollution.

This initiative gave rise to the AfriForum landfill site audit project, also referred to as Don't mess with our waste. The aim of this project is to audit the minimum compliance requirements for landfill sites in the municipalities of AfriForum's 134 branches across the country and to compare these with their waste management licences. Inadequate waste management, the collapse of infrastructure, corruption, health and safety issues, a shortage of air

space for waste, global warming and pollution have forced AfriForum to start this project to protect South Africans' constitutional rights and protect our natural environment. AfriForum is of the opinion that very few municipalities comply with waste regulations, and that local authorities display a lack of accountability for proper waste management, monitoring and licensing. In 2016 AfriForum approached Edna Molewa, Minister of Environmental Affairs, about the growing environmental problem of landfill sites across South Africa. The minister undertook to address these issues in collaboration with AfriForum.

Waste management practices in specific municipalities were assessed to determine whether each one was being managed responsibly and to ensure that best practices and environmental, health and safety requirements were being met. The audit results for each municipality were analysed and converted to a score out of 100 to measure compliance performance. These results are collated in this investigational report. Municipalities that apply responsible waste management will be rewarded with certificates.



Animals graze on the Parys landfill site in the Free State

THE FACTS

In terms of the South African Constitution, waste management is a service that has to be provided by local governments.

According to the 2012 report on the condition of the environment, it is calculated that 42 million m³ of ordinary (household) waste and 5 million m³ of hazardous waste are generated annually. Non-compliance at landfill sites pollutes the air, environment and water sources. This cannot be tolerated, because it directly affects the health and safety of the community.

The management of household waste in South Africa is currently faced by many challenges, including law enforcement, management (such as financial and personnel management, as well as the management of equipment) and institutional behaviour (management and planning).

The South African waste management strategy is based on a range of laws aimed at managing and preventing pollution

of the environment. The most pertinent of these laws is the Hazardous Substances Act, 1973 (Act No. 15 of 1973), which regulates the treatment and destruction of hazardous substances. Other relevant acts include the Environment Conservation Act, 1989 (Act No. 73 of 1989) and the National Environmental Management Act, 1998 (Act No. 107 of 1998). The National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) was promulgated specifically to regulate waste management in South Africa.

The Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000) furthermore requires waste management services to be provided to all local communities in a financially and environmentally responsible manner to promote the accessibility of basic services and sustainable waste management.

Hardly any fault can be found with South African legislation to manage waste properly. However, the appropriate legislation does not appear to be enforced.



A successful landfill site in Tzaneen, with an operative weighbridge, fence and complete infrastructure

The government is obliged by the Constitution to uphold the rights in section 24 of the Constitution through organs of state that are responsible for the implementation of legislation on waste. The government must introduce

uniform measures aimed at reducing the amount of waste that is generated and at ensuring that waste is re-used, recirculated and recycled in an environmentally friendly manner, or treated and disposed of safely.

LANDFILL SITES

A landfill site is a place where waste is dumped, levelled, covered with sand and left to decompose. Landfill sites are also called “rubbish dumps”, “rubbish heaps”, or “rubbish tips”. These sites should be located in places where waste can be managed without harming people’s health or damaging the surrounding environment.

PLEASE NOTE: It is against the law to dump waste in places that are not licensed by the Department of Environmental Affairs as landfill sites.

In terms of section 9(1) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) a municipality must employ its executive powers to provide waste management services – including refuse removal and the storage and destruction of waste – in such a way that it does not conflict with national and/or provincial standards.

Classification of waste

Waste is divided into two categories, namely general and hazardous waste.

1. General waste (also called household waste) is waste

from urban areas, mainly from houses, offices and construction sites. This includes building rubble, garden refuse, waste from people’s houses and waste from towns and cities. The local authority is responsible for the collection, transport and management of waste in urban areas. The local council must use a portion of the money obtained from residents in their area to deliver this service. In other words: if you pay rates, you pay to have your refuse removed. General waste is dumped at general landfill sites, identified in official documents by the symbol G.

2. Hazardous waste is waste that can pollute the environment and harm people’s health. This waste comes from factories, mines and hospitals and includes toxic substances (toxic waste), germ-bearing waste and explosive or easily combustible waste. Hazardous waste is classified from 1 (very hazardous) to 10 (slightly hazardous). This may be dumped only at sites that are equipped to handle it. These sites are identified by the symbol H:h or H:H in official documents.



A large number of reclaimers can be seen at landfill sites across South Africa

PLEASE NOTE: This AfriForum audit report focuses only on municipal/private landfill sites for general waste. However, carcasses, sewage, medical waste and other types of

hazardous waste were also found on general landfill sites. This study refers to such cases.

THE PROBLEM

Waste from any urban community will not only create an aesthetic problem, but can also pose severe health risks if it is not controlled. These risks are increased if the waste contains hazardous substances.

Local authorities can and should be held criminally liable for acts of negligence that affect people's health or cause pollution. Local authorities can also be held civilly liable for associated financial costs, particularly relating to the closing or rehabilitation of landfill sites and the rehabilitation of polluted soil intended for urban development.

The waste we generate in cities can be detrimental to people's health and the environment if:

- » waste is not taken to properly managed land fill sites but illegally dumped on open sites;
- » the landfill sites are located close to where people live;
- » the landfill sites are poorly designed and developed (for instance where leached or toxic water gets into the groundwater reservoirs and rivers); or
- » the landfill sites are poorly managed (for example if they are not fenced, no access control is applied, animal carcasses are lying around, fires are burning on the site or the waste is not covered with sand and compacted every day).

Problems with landfill sites

People who live or work close to landfill sites are exposed to a number of risks and hazards. They include the following:

- » Landfill sites can be very unsafe, noisy, smelly and visually unattractive.
- » Vehicles collecting or dumping waste can pose safety risks.
- » Spontaneous combustion and fires on the sites can pollute the air.
- » The gases on landfill sites can cause explosions.
- » Pollution on the site can penetrate the surrounding natural water sources and soil.
- » People can become ill if they breathe the polluted air, drink toxic water or eat food that has been poisoned by the soil.
- » People can develop cancer, asthma and other lung and chest diseases.
- » Birth defects may occur and children growing up close to landfill sites can be weak and sickly.
- » Landfill sites attract animals and insects carrying germs and diseases, for instance rats, mice and flies, that can transmit these diseases to people who come into direct contact with the site.



A rotting carcass in a landfill site can add to health risks.

THE PROJECT

Various communities participated in the project by inspecting their local landfill sites and answering 33 questions (25 points) about them. This contributed to the audit of compliance with the minimum requirements for landfill sites. They were accompanied by AfriForum's provincial coordinators and various other stakeholders, including municipal officials, the media and service providers.

The Deputy Director-General for Waste Management of the Department of Environmental Affairs, Mr Mark Gordon, provided AfriForum with the contact details of the department's provincial waste management officials so that they could be invited to the landfill site audits. They are available to assist AfriForum after the conclusion of the project.

The Gauteng Department of Agriculture and Rural Development (GDARD) joined forces with AfriForum and private waste management officers to conduct a landfill site audit and provided inputs with the compilation of a new audit questionnaire.

Almost every licensed landfill site is required to be audited annually by independent parties or organisations. AfriForum is therefore well positioned as a community watchdog to conduct a reliable audit on the various local landfill sites.

Participants were encouraged to take photos as evidence to

increase the credibility of the study. A final score was calculated by awarding one point for each category complying with the minimum requirements. The final score was multiplied by four to achieve a compliance score out of 100.

Example: 15 of the 33 questions (total of 25 points) comply with the requirements. Certain points carry more weight than others, depending on the importance of the standard.

Therefore:

$$15 \times 4 = 60\%$$

PLEASE NOTE: Each municipality achieving more than 80% will receive a certificate of appreciation from AfriForum. Sites that are managed excellently can achieve 100%. Such sites will receive special recognition and a floating trophy on which the name of the municipality concerned will be affixed.

Please refer to the action plan that relates to municipalities receiving a score of less than 80%.

In 2016 private landfill site companies approached AfriForum to showcase the standards in the private sector. Since 2016, AfriForum has therefore been auditing the private sector's landfill sites as well, to compare it with those of the government.



AfriForum audits landfill sites together with the Ekurhuleni Metro. Here, the Simmer & Jack landfill site in Germiston is being audited.

RESULTS

In 2014 AfriForum audited 83 landfill sites across South Africa. 56 were audited in 2015, and 83 in 2016, of which three landfill sites were in the private sector. In 2017 AfriForum audited 105 sites, of which three were in the private sector; and 114 sites were audited in 2018, of which five were private sites.

The results of the landfill sites audited in 2014, 2015, 2016 and 2017 are also included in this report so that they can be compared with the 2018 results.

Only 33 (29%) of the 114 landfill sites that were audited, met 80% or more of the minimum requirements for

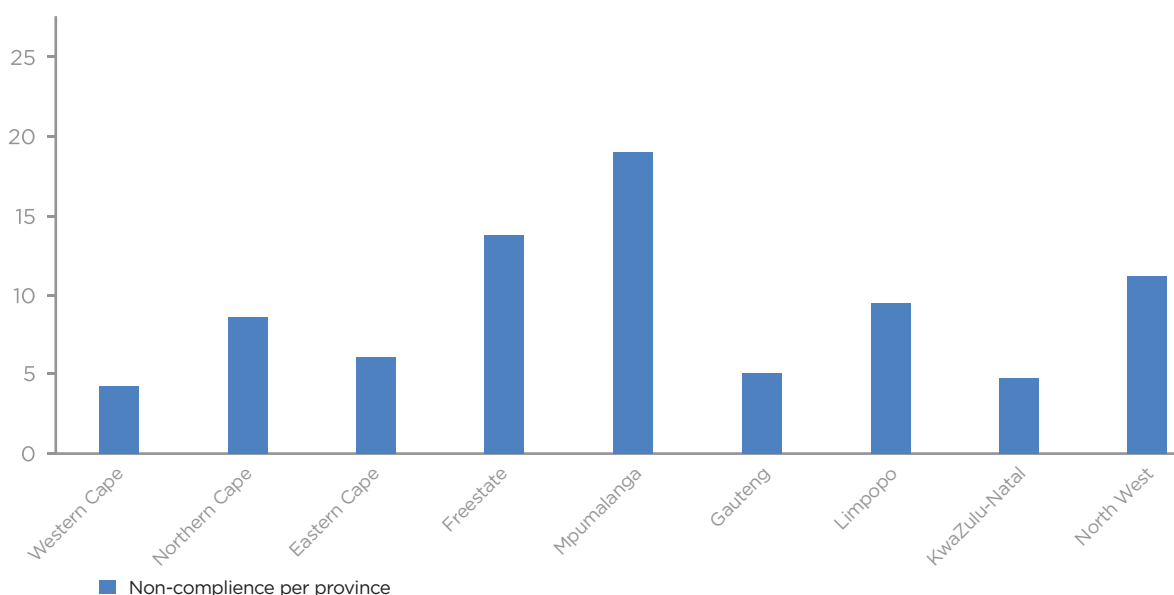
landfill sites. This means that 81 municipalities (71%) did not meet the minimum requirements. This clearly points to major shortcomings with respect to those people who are responsible for proper waste management across the entire country. The number of successful landfill sites has, however, increased since 2017, when only 22% of landfill sites met 80% or more of the minimum requirements.

The table below indicates the number of landfill sites that were audited in each province, as well as the number that complied with or did not comply with the minimum requirements for landfill sites.

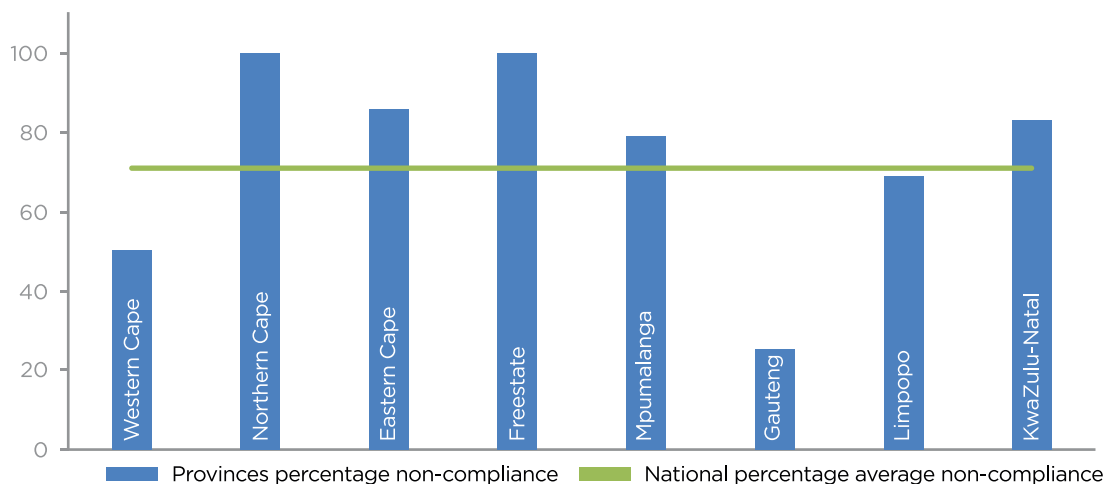
Table 1: Statistics on the compliance/non-compliance with minimum requirements by landfill sites, per province

	Number of landfill sites that were audited					Number of landfill sites complying with more than 80% of the minimum requirements					Number of landfill sites not complying with the minimum requirements				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Western Cape	8	5	9	10	8	3	2	2	3	4	5	3	7	7	4
Northern Cape	7	5	9	10	8	3	0	1	1	0	4	5	8	9	8
Eastern Cape	-	7	5	3	7	-	1	1	0	1	-	6	4	3	6
Free State	11	10	13	14	14	1	0	2	1	0	10	10	11	13	14
Mpumalanga	11	8	11	17	24	0	1	0	0	5	11	7	11	17	19
Gauteng	12	4	10	22	20	3	0	2	13	15	9	4	8	9	5
Limpopo	10	7	8	9	13	3	1	3	3	4	7	6	5	6	9
KwaZulu-Natal	13	3	6	7	6	5	0	1	1	1	8	3	5	6	5
North West	11	7	12	13	14	3	1	3	1	3	8	6	9	12	11
National total	83	56	83	105	114	21	6	15	23	33	57	50	68	82	81

The information for 2018 in the table above can also be seen in the colomgraph below.

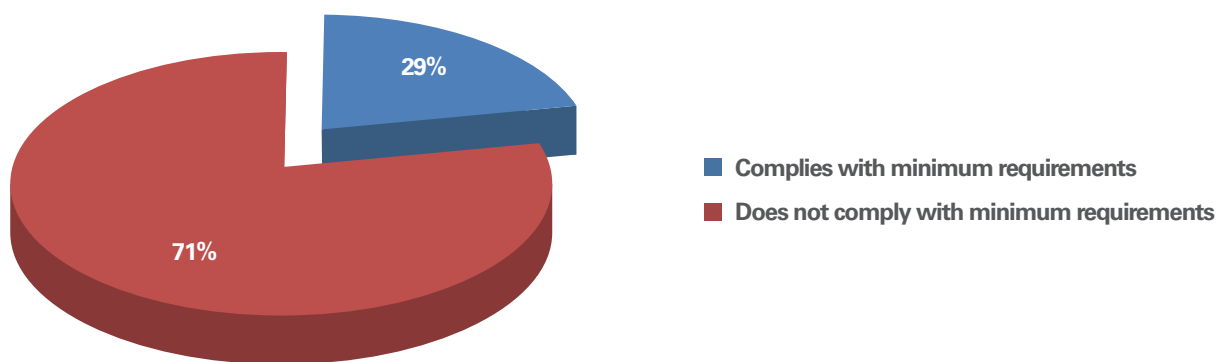


Graph 1: Number of landfill sites per province not complying with minimum requirements



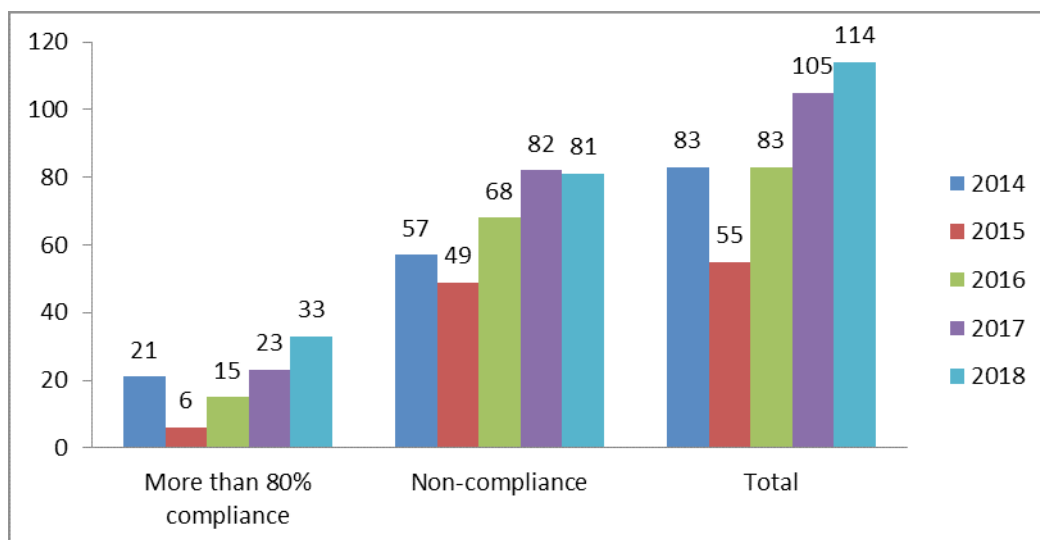
Graph 2: The national average for landfill sites compared with the provincial average for landfill sites not complying with the minimum requirements

Graph 2 above indicates what percentage of landfill sites in the country complies with the minimum requirements for landfill sites, and what percentage does not.



Graph 3: Percentage of landfill sites across the country complying with minimum requirements

In graph 4, the audit results of 2014, 2015, 2016, 2017 and 2018 are compared. The graph does not indicate whether the condition of landfill sites have improved or deteriorated.



Graph 4: Comparison of the compliance and non-compliance of landfill sites in 2014, 2015, 2016, 2017 and 2018

Table 2 below indicates the percentages awarded for compliance to each individual municipality in 2014, 2015, 2016, 2017 and 2018. Illegal landfill sites are indicated in yellow. Landfill sites in the private sector are indicated in blue.

Table 2: AfriForum audit scores for 2014, 2015, 2016, 2017 and 2018

Name of branch/ landfill site	Municipality/ responsible institution	License number	Compliance score				
			2014	2015	2016	2017	2018
Eastern Cape							
Aliwal North	Maletswai LM	-	-	-	-	-	30%
Barkly East	Senqu LM	16/2/7/U601/B3/P470	-	88%	92%	-	-
Burgersdorp	Walter Sisulu LM	-	-	-	-	-	2%
Cradock	nxuba Yethemba LM	B33/2/1000/33/P122	-	24%	36%	-	-
Elliot	Sakhisizwe LM	-	-	16%	-	-	0%
Hofmeyr	Enoch Mgijima LM	-	-	-	-	0%	-
Krakeelrivier	Kou-Kamma LM	-	-	36%	40%	-	-
Louterwater	Kou-Kamma LM	-	-	8%	32%	-	-
Molteno	Enoch Mgijima LM	-	-	-	-	0%	0%
East Londen	Buffalo City Metro	16/2/7/R301/D1/29/P381	-	-	-	-	6%
Port Elizabeth	Nelson Mandela Bay Metro	16/2/7/M200/D1/21/P278	-	76%	-	-	99%
Queenstown	Enoch Mgijima LM	-	-	-	-	-	14%
Tarkastad	Enoch Mgijima LM	-	-	-	-	4%	-
Twee Riviere	Kou-Kamma LM	-	-	12%	40%	-	-
Freestate							
Bethlehem	Dihlabeng LM	-	-	-	-	56%	22%
Bloemfontein North	Mangaung Metro	16/2/7/C351/2/289	-	72%	96%	89%	18%
Bloemfontein South	Mangaung Metro	16/2/7/C351/2/289	-	68%	80%	68%	18%
Boshoff	Tokologo LM	-	52%	-	-	19%	11%
Bothaville	Nala LM	16/2/7/C604/D1/Z1/P340	32%	8%	4%	-	4%
Brandfort	Masilonyana LM	WML/BAR/13/2014	-	4%	24%	9%	-
Bultfontein	Tswelopele LM	WML/BAR/07/2014	-	-	-	42%	-
Dealesville	Tokologo LM	12/9/11/L886/2	36%	-	52%	31%	3%
Frankfort	Mafube LM	-	40%	48%	16%	1%	0%
Harrismith	Maluti-A-Phofung LM	-	-	24%	16%	-	20%
Heilbron	Ngwathe LM	-	-	12%	8%	0%	0%
Hertzogville	Tokologo LM	-	-	-	-	-	52%
Parys	Ngwathe LM	-	-	-	-	-	8%
Petrus Steyn	Nketoana LM	-	16%	8%	-	-	-

Reitz	Nketoana LM	16/2/7/C805/D4/721/P341	60%	68%	-	-	-
Sasolburg	Metsimaholo LM	-	-	-	36%	16%	18%
Senekal	Setsotho LM	-	-	-	-	-	23%
Theunissen	Masilonyana LM	16/2/7/c402/D3/21/D339	-	-	24%	33%	-
Verkeerdevlei	Mosilonyana LM	WML/BAR/15/2014	-	-	-	6%	-
Welkom	Matjhabeng LM	-	-	-	12%	-	-
Welkom	Matjhabeng LM	-	-	-	16%	33%	-
Winburg	Masilonyana LM	B33/2/340/20/P48	-	12%	12%	11%	13%
Gauteng							
Bronkhorstspuit	City of Tshwane Metro	B33/2/220/116	-	-	64%	75%	88%
Cullinan (Depot)	City of Stad Tshwane Metro	-	60%	64%	-	70%	-
Ga-Rankuwa	City of Stad Tshwane Metro	16/2/7/A230/D9/Z3/P489	-	-	-	83%	92%
Hatherley	City of Stad Tshwane Metro	B33/2/123/88/P215	-	-	36%	80%	80%
Magalieskruin	City of Stad Tshwane Metro	-	-	-	52%	-	-
Mooikloof	City of Stad Tshwane Metro	-	-	60%	-	-	-
Onderstepoort	City of Stad Tshwane Metro	B33/2/123/7/P6	80%	-	52%	70%	84%
Pretoria East	City of Stad Tshwane Metro	-	60%	60%	-	-	-
Rooihuiskraal	City of Stad Tshwane Metro	-	-	-	84%	-	-
Soshanguve	City of Stad Tshwane Metro	B33/2/123/101/P43	-	-	-	83%	84%
Alberton (Heidelberg Road Transfer Station)	Ekurhuleni LM	16/2/7/C221/0494Z10/P465	-	-	-	93%	97%
Benoni	Ekurhuleni LM	-	-	-	-	76%	-
Boksburg	Ekurhuleni LM	16/2/7/c221/D24/21/P512	-	-	-	-	97%
Brakpan	Ekurhuleni LM	B33/2/321/172/P137	-	-	-	89%	97%
Germiston	Ekurhuleni LM	B33/2/0322/494/P223	-	-	-	92%	100%
Kempton Park (Chloorkop)	Ekurhuleni LM	-	-	-	-	97%	-
Kempton Park (Highveld Transfer Station)	Ekurhuleni LM	-	-	-	40%	97%	-
Primrose	Ekurhuleni LM	-	-	-	68%	41%	-
Springs (Rietfontein)	Ekurhuleni LM	16/2/7/C221/D494/P275	96%	-	-	88%	86%
Robbenson	Ekurhuleni LM	16/2/7/C221/D11/22/P22	-	-	-	-	92%

Vereeniging (Sonlandpark Transfer station)	Emfuleni LM	-	-	-	-	-	8%
Vanderbijlpark	Emfuleni LM	-	60%	-	-	28%	38%
Meyerton	Midvaal LM	002/12-13/W0001				96%	96%
Westonaria	Rand West City	16/2/7/C231/D21/Z	-	-	-	47%	9%
Randfontein	Rand West City	B33/2/323/34/P12	-	-	-	33%	6%
Heidelberg	Lesedi LM	-	52%	32%	-	18%	30%
Bon Accord Landfill Site	The Waste Group	B33/2/123/154/P191	-	-	-	98%	98%
Mooiplaats	The Waste Group	16/2/7/A230/154/21/p311	-	-	76%	99%	98%
Interwaste FG Landfill Site	Interwaste Environmental Solutions	GAUT 002/10-11/W0030	-	-	100%	100%	100%
KwaZulu-Natal							
Hluhluwe	The Big Five False Bay LM	-	-	-	24%	0%	20%
Margate	Ray Nkonyeni LM	16/2/7/T402/DS/Z1/P26/A1	-	-	-	70%	-
Newcastle	Newcastle LM	16/2/7/3V301/B2/Y2/P476	-	-	80%	80%	80%
Paulpietersburg	eDumbe LM	-	44%	4%	16%	14%	10%
Pongola	uPhongolo LM	DC26/WML/0001/2014	-	-	68%	54%	68%
Utrecht	eMadlangeni LM	-	52%	32%	68%	16%	7%
Vryheid	AbaQulusi LM	-	36%	40%	32%	41%	24%
Limpopo							
Ellisras	Lephalale LM	-	-	-	-	58%	32%
Groblersdal	Elias Motsoaledi LM	12/4//10-B/10M2	44%	20%	72%	90%	92%
Hoedspruit	Maruleng LM	-	-	-	-	18%	18%
Marble Hall	Ephraim Mogave LM	16/2/7/B300/D58/ZI/P261	72%	72%	88%	84%	84%
Naboomspruit	Mookgophong LM	16/2/7A600/D7/72/P399	32%	28%	36%	19%	32%
Naboomspruit	Western Breeze	-	-	-	-	-	20%
Naboomspruit	Die Oog (Western Breeze)	-	-	-	-	-	32%
Nylstroom	Modimolle LM	16/2/7/A600/D2/Z1/P380	-	48%	16%	-	12%
Phalaborwa	Ba-Phalaborwa LM	16/2/7/B700/016/21/P276	80%	84%	80%	32%	64%
Leeupoort	Thabazimbi LM	16/2/7/A240/D21/21/P354	-	52%	-	-	2%
Louis Trichardt	Makhado LM	12/9/11/L413/5	52%		32%	70%	80%
Tzaneen	Greater Tzaneen LM	16/2/7/B800/D2/Z23/1/P501	-	-	100%	100%	100%
Warm Baths	Bela-Bela LM	B33/2/123/3	52%	-	56%	40%	37%
Northern Cape							
Barkly-West	Dikgatlong LM	-	-	-	16%	-	-
Douglas	Siyancuma LM	-	-	-	-	-	2%

Deben	Gamagara LM	-	-	-	-	2%	-
Hartswater	Phokwane LM	-	52%	-	76%	-	57%
Jan Kempdorp	Phokwane LM	-	-	-	32%	-	-
Kathu	Gamagara LM	-	-	-	56%	19%	16%
Kimberley	Sol Plaatje LM	16/2/7/C901/D2/P265	80%	48%	36%	-	-
Kuruman	Ga-Segonyana LM	B33/2/441/9/P128	84%	72%	56%	39%	27%
Olifantshoek	Gamagara	-	-	-	-	14%	-
Orania	Orania Dorpsraad	NC/PIX/SIY/ORA/04/2016	-	-	-	95%	-
Postmasburg	Tsantsabane LM	-	-	-	56%	12%	41%
Springbok	Nama Khoi LM	16/2/7/F300/D9/21/P315	28%	8%	20%	7%	0%
Upington	Khara Hais LM	-	80%	-	84%	8%	4%
Warrenton	Magareng LM	-	-	-	-	6%	-
Williston	Karoo Hoogland LM	-	8%	8%	-	10%	10%
Northwest							
Bloemhof	Lekwa-Teemane LM	NWP/WM/DR4/2011/11	-	16%	20%	2%	10%
Christiana	Lekwa-Teemane LM	NWP/WM/DR4/2011/09	24%	-	36%	4%	12%
Coligny	Ditsobotla LM	-	-	12%	8%	0%	0%
Delareyville	Tswaing LM	B33/2/330/44/P219	48%	8%	8%	9%	2%
Hartebeesfontein (Brits)	Madibeng	B33/2/0121/41/P81	-	-	84%	-	-
Klerksdorp	City of Matlosana LM	16/2/7/C241/D4Z2/P514	92%	64%	-	45%	18%
Klerksdorp	City of Matlosana LM	12/9/11/P50	92%	68%	-	-	-
Lichtenburg	Ditsobotla LM	-	24%	-	8%	-	--
Ottosdal	Tswaing LM	NWP/WM/NM4/2012/11	-	-	40%	29%	2%
Potchefstroom	(JB Marks LM)The waste group	D00232-01	96%	-	100%	90%	94%
Potchefstroom	Tlokwe LM	16/2/7/C231/D13/Z1/P	-	-	-	--	89%
Rustenburg	Rustenburg LM	12/9/11/P121	-	-	-	37%	88%
Sannieshof	Tswaing LM	NWP/WM/NM4/2012/09	32%	-	12%	2%	2%
Schweizer-Reneke	Mamusa LM	16/2/7/C301/D2/23/P421	-	-	64%	17%	-
Stella	Naledi LM	NWP/WM/DR1/2013/16	32%	12%	16%	4%	2%
Swartruggens	Kgetlengrivier LM	-	-	-	-	0%	0%
Ventersdorp	JB Marks LM	-	-	-	-	-	3%
Vryburg	Naledi LM	NWP/WM/DR1/2009/01	96%	92%	96%	50%	52%
Mpumalanga							
Amersfoort	Dr. Pixley Ka Isaka Seme LM	-	-	-	-	-	6%
Belfast	Emakhazeni LM	12/9/11/P95	24%	-	8%	10%	14%
Bethal	Govan Mbeki LM	17/4/WL/MP/307/13/02	-	72%	12%	17%	11%
Carolina	Albert Luthuli LM	-	-	-	-	-	0%

Delmas	Victor Khanye LM	B33/2/220/9/P518	-	48%	24%	14%	6%
Dullstroom	Emakhazeni LM	-	-	-	12%	2%	0%
Ermelo	Msukaligwa LM	16/2/7/C112/D1/Z1/P427	76%	84%	52%	42%	18%
Evander	Govan Mbeki LM	-	-	-	-	-	0%
Hendrina	Steve Tshwete LM	-	-	-	-	-	67%
Kinross	Govan Mbeki LM	17/4/WL/MP/307/15/01	-	-	-	6%	6%
Leandra	Govan Mbeki LM	-	-	-	-	-	20%
Lydenburg	Thaba Chweu LM	-	40%	56%	12%	35%	36%
Machadodorp	Emakhazeni LM	-	8%	16%	16%	6%	3%
Morgenzon	Lekwa LM	-	-	-	-	1%	1%
Middelburg	Steve Tshwete LM	16/2/7/B10/D33/Z1/P412	-	-	-	36%	95%
Middelburg (Dennesig Transfer Station)	Steve Tshwete LM	-	-	-	-	44%	94%
Middelburg (Transfer Station)	Steve Tshwete LM	-	-	-	-	-	100%
Nelspruit	Mbombela LM	12/9/11/P5	-	-	-	64%	80%
Piet Retief	Mkhondo LM	-	64%	40%	68%	57%	39%
Secunda	Govan Mbeki LM	17/4/WL/MP/307/13/01	24%	-	76%	42%	19%
Standerton	Lekwa LM	17/4/A18/MP305/10/01	32%	24%	32%	26%	14%
Volkstrust	Dr. Pixley Ka Isaka Seme LM	-	-	-	-	-	16%
Witbank	Emalaheni LM	B33/2/210/32/P136	64%	68%	64%	47%	30%
White River (Transfer Station)	Mbombela LM	-	-	-	-	74%	80%
Western-Kaap							
Bellville	City of Cape Town Metro	19/2/5/4/A5/6/WL0050/12	-	80%	-	80%	97%
Gansbaai	Overstrand LM	16/2/7/G400/D24/21/P335	-	-	96%	-	-
George	George LM	WL0683/4	-	-	52%	41%	52%
Hermanus	Overstrand LM	16/2/7/G501/D3/Z3/P374	96%	92%	88%	100%	100%
Stilbaai	Hessequa LM	19/2/5/1/D/11/WL0060/14	-	-	-	62%	38%
Klawer	Matzikama LM	D05776/01	-	60%	44%	43%	-
Ladismith	Kannaland LM	-	76%	36%	-	-	-
Lutzville	Matzikama LM	-	-	-	36%	44%	-
Mossel Bay	Mossel Bay LM	19/2/5/1/D6/17/WL0084/14	-	-	64%	80%	-
Oudtshoorn	Oudtshoorn LM	B33/2/900/3/5/P167	36%	40%	32%	0%	26%
Riversdal	Hessequa LM	B33/2/800/13/S/P153	-	-	-	-	84%
Stellenbosch	Stellenbosch LM	16/2/7/G203/D16/21/P331	-	-	-	-	89%
Velddrif	Bergrivier LM	-	-	-	-	-	69%
Vredendal	Matzikama LM	-	-	-	28%	53%	-
Vanrhynsdorp	Matzikama LM	-	-	-	68%	73%	-
Wellington	Drakenstein LM	-	-	-	-	-	68%

Key:

Landfill site with permit	
Landfill site without permit	
Private landfill site	
Transfer station	



A fire burning on the Welkom landfill site in the Free State

An average audit was calculated for each province in which the landfill sites were audited in 2014, 2015, 2016, 2017 and 2018. The percentage allocated to each individual site in a particular province was aggregated and the total was then divided by the number of sites in that province.

Example:

In Mpumalanga, six landfill sites were audited in 2014, 2015 en 2016. Therefore:

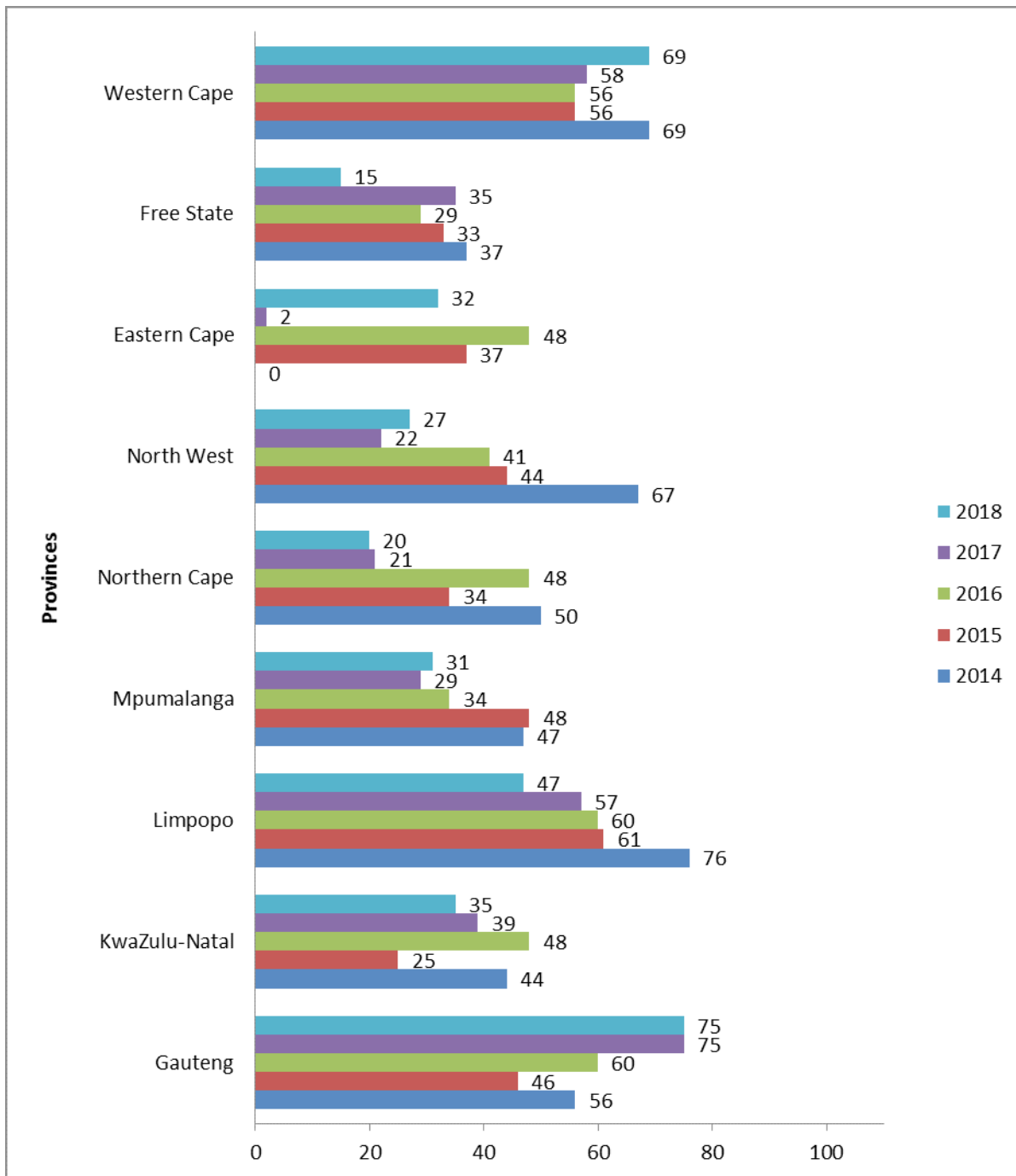
$76\% + 8\% + 40\% + 64\% + 32\% + 64\% = 284\%$ and

$284\%/6 = 47\%$ average in 2014

$84\% + 16\% + 56\% + 40\% + 24\% + 68\% = 288\%$;
therefore $288\%/6 = 48\%$ average in 2015

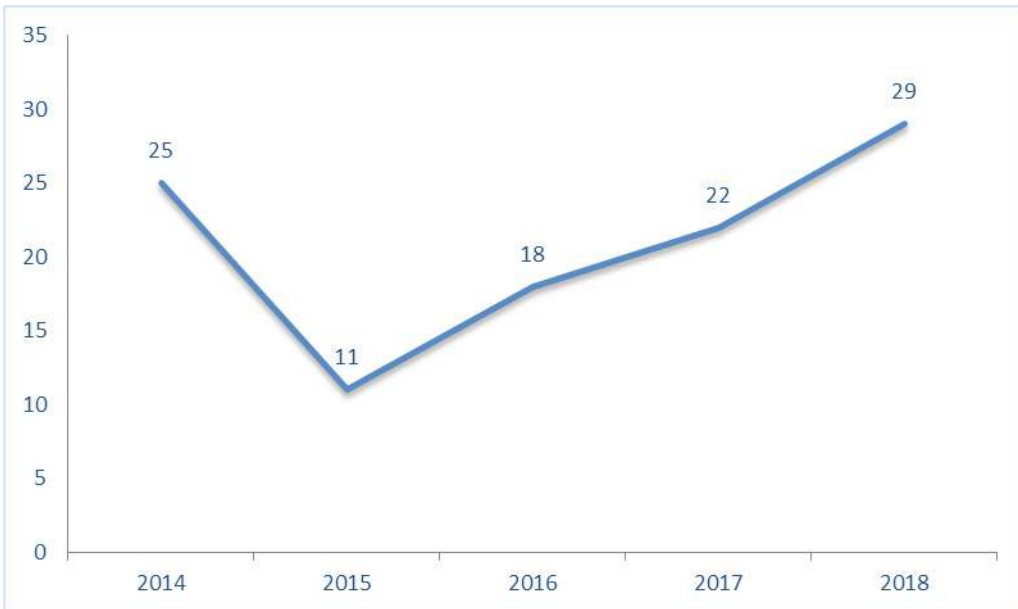
The conclusion can therefore be made that the landfill sites in this province have improved by 1% since the previous year.

In graph 5 on the next page, the average audit scores for each province for 2014, 2015, 2016, 2017 and 2018 are indicated.



Graph 5: Average audit scores (percentages) per province for 2014, 2015, 2016, 2017 and 2018

In graph 6 on the next page the percentage compliance from 2014 to 2018 is indicated.



Graph 6: Average compliance (percentages) for 2014, 2015, 2016, 2017 and 2018

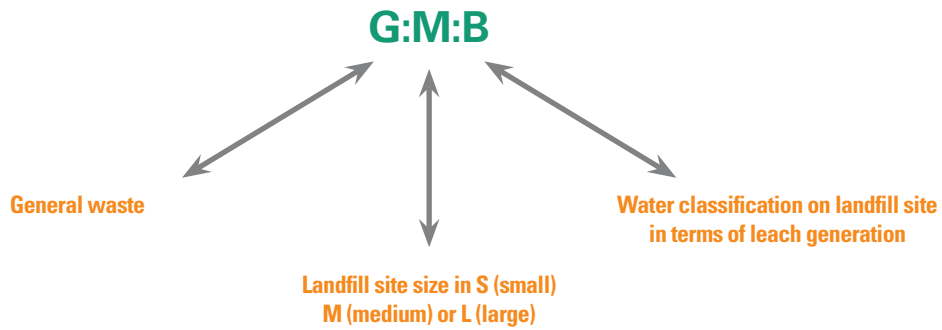
QUESTIONNAIRE

The questionnaire for the 2017/2018 landfill site audit was revised and differs from the one used in 2014, 2015 and 2016. The 33 questions now cover all the minimum requirements for a landfill site.

The questionnaire was compiled to establish whether a landfill site complies with the minimum requirements for landfill sites as prescribed in the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008). To pass this audit, a landfill site has to comply with at least 80% of the minimum requirements¹ and then strive to improve the 20% non-compliance.

The challenge for the community is that each landfill site has a unique permit or licence with requirements that can be stricter than the above minimum requirements. Inadmissible waste can for example be permitted on certain conditions and requirements that have to be met by that particular landfill site. In addition, landfill sites are categorised into three sizes – each with its own conditions. The general rule is: the bigger the site, the stricter the requirements.

Accordingly, AfriForum decided to compile a questionnaire that can apply to any general (G type) landfill site. The classification system works as follows:



¹The minimum requirements for landfill sites (1998, second edition) that was published by the Department of Water and Forestry.

EXAMPLE:

The questionnaire is divided into five main and sub-categories.

The sum total of the points for the questionnaire is 25. This can be multiplied by 4 to obtain the percentage (%) of the result.

Score for main category

Minimum requirement	Fully compliant 1	Partially compliant ½	Non-compliant 0	Comments	Score
1. Access and controls					/8
1.1 Signs					
a) Signs in the appropriate official languages must be erected in the vicinity of the landfill, indicating the route and distance to the landfill site from the nearest main roads.	X				½ / ½
b) Is there a sign at the gate indicating what type of waste can be dumped as well as the operating hours of the site?		X			½
1.2 Road access					
a) Are all roads to and within the site maintained?			X		0 /1

Weight of question

Mark with x in appropriate box. Use own discretion, with minimum requirement as outcome.

Comments are important for evidence, notes and additional information for discussions with authorities after the audit

Table 3: Questionnaire

AFRIFORUM'S GENERAL CHECKLIST ON MINIMUM REQUIREMENTS FOR LANDFILL SITES 2017

(Take photos as proof of maladministration)

What is the name of the landfill site?					
Who is the responsible authority?					
Small/medium/large site (see classification below)					
Minimum requirement	Fully compliant 1	Partially compliant ½	Non-compliant 0	Comments	Marks
1. Access and controls					/8
1.1 Signs					
c) Signs in the appropriate official languages must be erected in the vicinity of the landfill, indicating the route and distance to the landfill site from the nearest main roads.					/ ½
d) Is there a sign at the gate indicating what type of waste can be dumped, as well as the operating hours of the site?					/ ½
1.2 Road access					
b) Are all roads to and within the site maintained?					/1
c) Two-way traffic must be possible in all weather conditions.					/ ½
d) Unsurfaced roads must be watered regularly to restrict dust levels.					/ ½
1.3 Access control and security					
a) Is there a proper 1,8 m fence around the landfill to keep people and animals out?					/ ½
b) Is the fencing fixed/whole and is maintained?					/ ½
c) Is there access control at the landfill's gate(s)?					/1
d) Does the site have security guards patrolling the site?					/1
1.4 Waste acceptance and waste types					
a) Prior to waste being accepted, it must be inspected to confirm that it is general waste.					/1

1.5 Tariffs					
a) Disposal tariffs to be displayed on notice boards.					/ ½
b) Are disposal fees collected?					/ ½
2. Resources					/ 3
2.1 Infrastructure					
a) There must be services such as water, sewerage, electricity, weigh bridges and site offices.					/1
2.2 Plant and equipment					
a) There must be sufficient machinery and equipment should be in working condition.*					/1
2.3 Staff					
a) The operation of all sites must be carried out under the direction of sufficiently qualified staff, for example: Site Supervisor Landfill Manager					/1
3. Operations					/ 7 ½
3.1 Operating plan					
a) Does the responsible authority have a waste operating management plan? The plan must include the following: I. Excavation sequence; II. Projected/progressive development of landfill with time; III. Daily cell construction; IV. Provision of wet weather cells; V. Site access; VI. Drainage; VII. Operating monitoring procedures, including the role of a monitoring committee; and VIII. Action plans in response to problems detected by monitoring					/1

b) Beskik die verantwoordelike gesag oor 'n reaksie-aksieplan? Dit sluit die noodontruimingsplan in.					/ ½
3.2 Site development and cells					
a) Do they compact the waste daily and cover it with soil to prevent waste being blown away by the wind?					/1
b) Does the responsible authority have a response action plan? This includes an emergency evacuation plan.					/1
3.3 Site development and cells					
a) Do they compact the waste daily and cover it with soil to prevent waste being blown away by the wind?					/1
b) An easily accessible wet weather cell (with a well-drained gravel-type base) must be constructed close to the site entrance, for use under abnormally wet conditions.					/1
3.4 Control of nuisances					
a) There may be no fires burning on the site.					/ ½
b) All litter must be contained within the site itself (preferably to be contained in the disposal area only)					/ ½
3.5 Waste reclamation					
a) Because of the risk to health and safety, waste reclamation by reclaimers must be prohibited at general waste disposal sites. Therefore, no reclaimers may be present at the site.					
b) If waste reclamation/recycling is taking place: are there facilities/provisions available for recycling?					/ ½
3.5 Prohibited wastes (unless specifically authorised by the permit or licence)					
a) No dumping of medical or animal waste (carcasses, bones, stomach content) occurs.					

b) No dumping of tyres occurs.					/ ½
4. Drainage					/ 3
a) Is there a proper and operational storm water infrastructure on the site?					/1
b) All drains must be maintained to promote run-off without excessive erosion.					/1
c) All contaminated water and leachate that forms on site must be stored in a sump or retention dam.					/1
5. Monitoring, recordkeeping					/ 3 ½
a) Records must be kept of all waste entering the site.					/1
b) Does the landfill site have a permit or waste management licence? What is the permit or licence number? A copy of the permit/licence should be available on site.					
c) Was the correct personal protective equipment issued to municipal workers on site?					/ ½
d) All landfills must be audited and inspected internally, every 12 months. Copies should be made available for public comment/input (e.g. landfill audit committee).					/ ½
e) Is there a landfill audit committee within the municipality of which communities can form part?					/ ½
Total					/ 25

WHAT HAS BEEN ACHIEVED SO FAR?

National landfill site audit project

After the completion of the 2016 landfill site audit report, a number of meetings were held with the Waste Management Division of the Department of Environmental Affairs. AfriForum also made a submission to the department's waste management licensing task team to have one landfill site per province rehabilitated.

Liaison with national, provincial and local governments

A positive relationship has been established with the Department of Environmental Affairs. Mr Mark Gordon, Deputy Director General of Chemicals and Waste Management, wrote a letter to AfriForum in which he provided the provincial waste management officers' contact details so that branches could involve them in the audit.

On the basis of the 2017 report, AfriForum Environmental Affairs identified the two weakest landfill sites and focuses on these, with close cooperation with the Gauteng Province's departments responsible for landfill site monitoring, legal compliance and licensing. As a result of this relationship, there has been a significant improvement in the Hatherley landfill site in Pretoria. However, the Libanon landfill site in the West Rand, serving Westonaria

and Randfontein, again did not pass the audit. Further steps will now be taken against the management of the Libanon landfill site.

The Hatherley landfill site, which is responsible for a large part of the waste of Gauteng North, has made positive changes to the site after talks with the appropriate authorities. After the landfill site only scored 36% in the 2016 landfill site audit, it was prioritised by AfriForum for the Department of Environmental Affairs and Tshwane Metro. After many meetings and talks to rehabilitate this landfill site, the refuse area has achieved 80% for two consecutive years.

Court cases

AfriForum's Naboomspruit branch was involved in a landfill site court case against the Lim 368 Local Municipality, which was heard on 9 October 2017, with the decision of the court pending. Judgment was delivered in favour of AfriForum in the Northern Gauteng High Court on 7 February 2018, with costs.

Since then, there has been little improvement to this landfill site. AfriForum is preparing for a contempt application.

ACTION PLAN

The 2018 report touched on various issues with municipalities across the country that are responsible for waste management.

Several municipalities that did not meet the minimum requirements in 2014, 2015, 2016 and 2017, also did not respond to the letters AfriForum sent to them regarding the mismanagement of landfill sites. These letters were also sent to all the municipalities that did not comply with the minimum requirements in 2017. Some even deteriorated further since the 2017 audit. AfriForum will monitor the progress of these sites and will act more strictly to ensure compliance with the minimum requirements.

In 2017 AfriForum brought up the landfill site issue during the public participation process for the integrated development plan in the various municipalities. AfriForum branches also started compiling action lists and submitting these to municipal managers to address the landfill site issue. In this way, AfriForum wants to ensure that the municipalities concerned budget sufficiently in the coming financial year to meet the needs of the community with respect to landfill sites.

The 2018 report will be used as a constant against which to measure the same infrastructure in all the other AfriForum branches in 2019.

The process for ensuring compliance includes the following:

1. A comprehensive track record or paper trail was started to keep a record of specific sites.
2. Non-compliance will be addressed in a letter demanding a comprehensive action plan from

the responsible authority. The municipality must indicate how and by what dates they will meet the requirements with which they do not comply at present.

3. Provincial departments are responsible for monitoring landfill sites, enforcing the law and issuing licences for unlicensed landfill sites. AfriForum will continue to exert pressure on the provinces to carry out their duties.
4. Should municipalities fail to resolve the issues, legal action will be taken. The possibility exists of a criminal case being opened against the administrative official.
5. AfriForum will also be obliged to rehabilitate landfill sites that do not comply with the minimum requirements, and to claim the money back from the municipality in question.
6. This report will also be handed to the Green Scorpions for further investigation of landfill sites not complying with the minimum requirements.
7. The 2018 report – which contains five years' landfill site records – will be submitted to the relevant minister and her department to discuss and implement strategies that will address the problems.
8. AfriForum will constantly investigate new technologies in terms of alternatives for landfill sites.

AfriForum believes that municipalities will collaborate to resolve these important issues and to ensure a safe and healthy environment for everyone in South Africa.

CONCLUSION

The AfriForum landfill site audit project demonstrates the need for a political decision to re-use and recycle waste in a sustainable manner, and to maintain and manage the infrastructure for waste management. For this reason the Minister was approached in 2016 to address the poor communication at local government level and to create a political will at grassroots level.

From the 2018 audit report it is clear that the watchdog function that AfriForum is performing is obtaining results at local level and, in particular, stimulates communication between communities and government officials. In the 2018 landfill site audit project, 29% of municipalities met the minimum requirements. This indicates an improvement compared to 2017, when only 22% landfill sites met 80% or more of the minimum requirements. However, these are still unacceptable achievements for South Africa and it indicates a lack of landfill site management among those responsible for proper waste management.

Mismanagement of landfill sites is caused by several factors, including:

- » corruption;
- » lack of leadership and accountability;
- » lack of the necessary waste management skills;
- » total disregard for the relevant legislation and the natural environment;
- » insufficient funds for rehabilitation;
- » misappropriation of funds; and
- » a lack of political will and low priorities awarded to landfill sites.

The report also shows that not a single illegal site (a site that does not have a license or waste management plan) meets the minimum legal requirements – nevertheless, municipalities keep on using them as landfill sites. No recycling is done on these landfill sites, and the sites pose great risks to human health and the environment. This problem must be addressed urgently.

The report also shows that success can be achieved to

address the above-mentioned problems. The success depends on five key elements:

1. In cases where the AfriForum branch is effectively involved in the waste management of its municipality, the community automatically performs a watchdog function. This increases the transparency of the municipality and thereby improves the management of refuse in general.
2. A successful municipality participates in democratic obligations by creating forums where the community can provide input and critically analyse its activities in order to comply with its constitutional obligation – in this case the sustainable management of a landfill site – and to progressively improve it annually.
3. The provincial department's role as monitor, law enforcement officer and licensor is extremely important for improving landfill site management at local government level. By involving provincial regulators at AfriForum's annual landfill site audit project, cooperation between the AfriForum branch and the department is promoted. It also forces the province to fulfil its constitutional obligations, whereas it may have been neglected in the past.
4. AfriForum approached a waste-to-energy company which offers an alternative to garbage disposal. AfriForum acts as a facilitator between municipalities and this company. The technology of the plants is world-class and environmentally friendly because the minimum gas emissions take place.
5. Lastly, the national government's biggest contribution is the overall supervision of the other two spheres of government and the creation of legislative and regulatory frameworks within which South Africa formulates its waste management strategies and sets standards for this. The challenge is to bring together these three spheres of government and communities, to collaborate in harmony in order to manage the country's solid waste sustainably.

AfriForum will continue to monitor the waste disposal sites that were audited, and to investigate alternatives to proper waste management in South Africa.



