

Kweneng District is located in the south-eastern part of Botswana. It borders Central District in northeast, Kgatleng District on the east, South-East District in southeast, Southern District in south, Kgalagadi District in the west, Ghanzi District in the north. The district is administered by a district administration and district council which are responsible for local administration. The seat of the district's government is Molepolole.*

Kweneng District Council (KwDC), through its Public Health Department is responsible for solid waste management in the district. KwDC provides waste collection and disposal services in some parts of the district. In other parts of the district, solid waste is collected by private operators under a franchise agreement with KwDC. In the district, there is one incineration facility (only for medical waste) and one engineered sanitary landfill located 30 kilometres from the district centre. The landfill is a regional landfill, i.e. solid waste from Kweneng District and other surrounding districts, including the capital Gaborone, are disposed at this landfill.

Sources: * Wikipedia, Kweneng District, accessed 15 April 2019, <https://en.wikipedia.org/wiki/Kweneng_District>

Information

Population	726,056 (2017)
Population growth (annual %)	N/A
Area (km ²)*	35,890
Climate	Hot, semi-arid climate
Main industries*	Agriculture, mining, construction
Currency**	USD 1: BWP 10.65 (Botswana pula) (August 2018)

Sources: * Wikipedia, Kweneng District, accessed 15 April 2019, <https://en.wikipedia.org/wiki/Kweneng_District>

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Current SWM Situation

Item	Outline
Institutional System	
Legal system	<ul style="list-style-type: none"> ● The Waste Management Act (1998).
Policy/Plan	<ul style="list-style-type: none"> ● Currently, there is no waste management plan.
Implementation system	<ul style="list-style-type: none"> ● KwDC provides sweeping, waste collection and disposal services. ● Private operators – under franchise agreements with KwDC – collect and dispose solid waste from some parts of the district. ● Other institutions involved in solid waste management (SWM) include: <ul style="list-style-type: none"> » The Ministry of Environment, Natural Resources Conservation and Tourism: responsible for the formulation of policies on SWM. » The Department of Waste Management and Pollution Control: responsible for policy formulation on SWM and licencing of operators. ● The council has partnered with Gaborone City Council to operate the Kweneng regional landfill.
Technical System	
Waste generation amount & characteristics	<ul style="list-style-type: none"> ● About 87,719.17 tons/year is generated (estimated at a rate of 0.3kg/person/day and a population of 726,056). ● The composition of the waste collected is as follows: <ul style="list-style-type: none"> » Food waste: 2.2%, plastic waste: 42.2%, paper: 30.8%, textile: 4.8%, wood: 8.2%, rubber, leather: 0.7%, metal: 4.8%, glass: 4.6%, other items: 1.7%.
Storage and discharge/ Collection and transportation/ Road sweeping	<ul style="list-style-type: none"> ● Waste amount collected at the disposal site is 87,719 tons/year (240 tons/day). Note: KwDC operates a regional landfill ● There are nine transfer stations. ● The council uses the following vehicles for the service: <ul style="list-style-type: none"> » 4 compactor trucks with a capacity of 9 m³, 2 compactor trucks with a capacity of 12 m³ and 2 compactor trucks with a capacity of 15 m³. In addition, the council has 1 top loader with a capacity of 5 m³ and another top loader with a capacity of 8 m³. ● Franchisees use 7 trucks (flat beds).
Intermediate treatment/ Recycling	<ul style="list-style-type: none"> ● There is one incineration plant. Location: S 24°29'00" E 25°42'43". ● The plant has a capacity of 3.2 tons/day. ● A total of 0.83 tons/day is delivered to the facility.

Item	Outline
Final disposal	<ul style="list-style-type: none"> ● There is one final disposal site. Location: S 24°29'03" E 25°42'44". ● The disposal site is located 30 km away from the district centre. ● 87,719 tons/year is disposed of. ● The landfill was designed to handle 65,000 tons/year. ● The site has the following features: <ul style="list-style-type: none"> » Bottom liner, leachate collection pipe, enclosed bund/embankment, leachate treatment facility, a weighbridge, a gate, a fence, drainage to prevent rainwater from getting to the waste, monitoring boreholes, and a tyre cutter. ● At the disposal site, waste is compacted and covered with soil.
Financial system	<ul style="list-style-type: none"> ● The council charges a monthly fee for waste collection: the charge is 10 BWP/month for 80L bag and 20 BWP/month for a 210L bin. ● The council also charges a tipping fee for each waste category, e.g. 40 BWP/ton for domestic waste. ● The council collects 9,325,000 BWP/year in revenue. ● Total expenditure is 4,066,000 BWP/year. ● Note: The total revenue and expenditure is not for SWM.
Environmental and social considerations	<ul style="list-style-type: none"> ● The council has a policy of supporting small and medium waste service providers. ● Communities are informed about proper waste management and the need to pay for waste collection services through public consultation meetings and flyers.
Donor support	<ul style="list-style-type: none"> ● JICA: cooperation through citizen participation, skills and knowledge transfer.
Areas for improvement (in order of priority)	<ul style="list-style-type: none"> ● Revenue collection. ● Staff capacity in solid waste management. ● Waste segregation and recycling system.

Waste Amount at Each Stage of Waste Flow*

Waste flow	Amount ** (ton/day)	Remarks
① Waste generation	N/A	Waste generated at houses, offices, shops, restaurants, etc.
② Discharge to collection	240	Waste discharged for collection services.
③ Self disposal	N/A	Disposal at generation sources, such as burning and burying.
④ Recycling at source	N/A	Reuse of materials, composting, sold to recyclers.
⑤ Collection and transport	240	Waste amount collected and transported.
⑥ Clandestine dumping	N/A	Waste illegally disposed of in unknown location.
⑦ Treatment	N/A	Material recycling, composting, incineration, etc.
⑧ Recycling/Reduction	0.75	Recycled and/or reduced waste amount by material recycling, composting, incineration, etc.
⑨ Residue	0.21	Residue from treatment facilities.
⑩ Final disposal site	N/A	Waste amount brought into disposal sites.
⑪ Recycling	1.28	Recycled at disposal sites.
⑫ Final disposal	239	Waste amount finally disposed of at disposal sites.

* Based on the waste flow chart on page 1.

** Figures include estimated values.

Location of Waste Management Facility and Related Photographs:



Weighbridge



Leachate pond



Landfill area



Incinerators



Tyre area



Tyre cutter



Compactor



Donkey cart in a rural area



Scrap metal



Final Disposal Site (coordinates: S 24°29'03" E 25°42'44")