



## **water & sanitation**

Department:  
Water and Sanitation  
**REPUBLIC OF SOUTH AFRICA**



EdTM

NA 2097

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### **MINISTER OF WATER AND SANITATION**

#### **NATIONAL ASSEMBLY: QUESTION 2097 FOR WRITTEN REPLY**

A draft reply to the above mentioned question asked by Ms A T Lovemore (DA) is attached for your consideration.

**DIRECTOR-GENERAL**

**DATE:** 14/11/14

**DRAFT REPLY APPROVED/AMENDED**

**MRS NP MOKONYANE**  
**MINISTER OF WATER AND SANITATION**

**DATE:** 24.11.14



## NATIONAL ASSEMBLY

### FOR WRITTEN REPLY

#### QUESTION NO 2097

**DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 24 OCTOBER 2014**  
**(INTERNAL QUESTION PAPER NO. 19)**

**2097. Ms A T Lovemore (DA) to ask the Minister of Water and Sanitation:**

- (1) With reference to the drinking water supply to Camdeboo Municipality, for every sampling point in the municipality, what are the results of the (a) bacteriological and (b) chemical analyses of water samples taken for assessment (i) in the (aa) 2012 and (bb) 2013 calendar years and (ii) since 1 January 2014;
- (2) with reference to the drinking water supply to Ikwezi Municipality, for every sampling point in the municipality, what are the results of the (a) bacteriological and (b) chemical analyses of water samples taken for assessment (i) in the (aa) 2012 and (bb) 2013 calendar years and (ii) since 1 January 2014;
- (3) in the case of test results indicating that the water is and/or was unsafe to drink, whether any notices to this effect were issued by either municipality; if not, (a) why not and (b) what action has been or is being taken to ensure consistent access to safe drinking water;
- (4) with respect to the current supply of water to (a) Camdeboo and (b) Ikwezi, (i) what sources of water are used to supply each community within the municipalities and (ii) what volumes are supplied;
- (5) with respect to the required future supply of water to (a) Camdeboo and (b) Ikwezi, whether the current sources are adequate to cater for (i) 5, (ii) 10 and (iii) 20-year growth projections; if not, what plans are in place to supplement the current supply?

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#### **REPLY:**

- (1)(a) Attached Annexure A is the analysis results for both bacteriological and chemical analyses for drinking water quality in the Camdeboo Municipality.
- (2)(a) Attached Annexure A is the analysis results for both bacteriological and chemical analyses for drinking water quality in the Ikwezi Municipality.
- (3) Yes 'Boil water Notice' was issued by Ikwezi Municipality for the local communities on 21 May 2012. This notice has not been rescinded, instead, communication and awareness campaigns have intensified. The Camdeboo Municipality has not issued a boil water notice.
- (3)(a) The Department of Water and Sanitation has addressed a letter to Camdeboo Municipality to warn the communities of Aberdeen and Niue Bethesda and Graaff-Reniet.
- (3)(b) Both Camdeboo and Ikwezi Municipalities have been requested to provide action plans to correct the areas of concern and to ensure consistent access to safe drinking water.

(4)(a)(i) The three (3) major towns in Camdeboo Municipality are supplied as follows:

- Graaff-Reinet is supplied from the Nqweba Dam and from 2 wellfields;
- Aberdeen is supplied solely from boreholes; and
- Nieu Bethesda is supplied from 2 boreholes.

Smaller settlements and farms outside the 3 major towns are all supplied with groundwater.

The two (2) major towns in Ikwezi Municipality are supplied as follows:

- Jansenville is supplied with water from a total of 9 production boreholes, not all of which are functional at present; and
- Klipplaat is supplied from the Klipfontein Dam, with 3 boreholes as back-up supply.

The rural settlements and farms outside of these 2 towns are all supplied with groundwater.

(4)(b)(ii) Water volumes supplied to Camdeboo Municipality are as follows:

- Graaff-Reinet is supplied with 5,0 million cubic metres per annum;
- Aberdeen is supplied with 0,3 million cubic metres per annum; and
- Nieu Bethesda is supplied with 0,012 million cubic metres per annum.

The volumes supplied to rural settlements and farms outside of these 3 towns are unknown, as this is currently not metered.

Water volumes supplied to Ikwezi Municipality are as follows:

- Jansenville is supplied with an estimated 0,28 million cubic meters per annum;
- Klipplaat's volume supplied is 17,197,011 cubic meters.

The volumes supplied to rural settlements and farms outside of these 2 towns are unknown, as this is currently not metered.

(5)(a) The current water sources within the Camdeboo Municipality are not adequate to cater for either 5, 10 and 20 year growth projections.

(5)(b) The adequacy of current sources to meet (i) 5, (ii) 10 and (iii) 20 year growth projections are as follows in Ikwezi Municipality:

The following plans are in place to supplement the current supplies to meet future requirements:

The first intervention in every one of the towns or settlements in both the Camdeboo and Ikwezi municipalities is to do full implementation of water conservation and water demand management. Furthermore, the planned interventions described below will be implemented.

Camdeboo Municipality future water supplies are planned as follows:

- Graaff-Reinet's supply will be augmented by incremental groundwater development of the Graaff-Reinet aquifer system, followed by further groundwater development of the N12C-c Groundwater Management Unit. Afterwards the re-use of water will take place, followed by possible trading of irrigation rights from the De Hoop Dam.

- On groundwater: The town of Graaff-Reinet obtains its bulk water from the Nqwebe Dam with available groundwater as an emergency supply. Under a current Bulk Water Supply Project, additional groundwater production boreholes were drilled on the Northern Aquifer and the yields are sufficient to supply to the current and long term water requirement. The town has 30 production boreholes of various yields and qualities. Possible seasonal groundwater quality fluctuations are being investigated and the quality data will be used to design the operating rules for both the groundwater production boreholes in conjunction with surface water abstraction from the Nqwebe dam.
- Aberdeen's supply will be augmented by groundwater development of the Regolith Karoo Aquifer.
- Nieu Bethesda's supply will be augmented by further groundwater development.
- The rural settlements and farms outside of these 3 towns will all be supplied with incremental groundwater development.

Ikwezi Municipality future water supplies are planned as follows:

- Jansenville's supply will be augmented by incremental groundwater development, which in some cases may include the treatment of water to bring it within acceptable quality standards.
- A water conservation and water demand management project has been initiated and completed for the town of Jansenville. The billing system has been improved, the flat rate has been replaced and since August water users are issued with accurate monthly water bills. As part of the project zone meters were installed together with 800 domestic flow meters.
- Assuming a typical use per capita, Klipplaat will be adequately supplied from the Klipfontein Dam until after the year 2035, after which further groundwater development will take place.
- The rural settlements and farms outside of these 3 towns will all be supplied using incremental groundwater development.

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## Annexure 1

Health failures in Camdeboo LM in 2012:

ABERDEEN PUBLIC TAP @ABERDEEN ECCMAB-001			
DATE	DETERMINANT	VALUE	STATUS
21 February 2012	E.coli count per 100ml	95	Unresolved
10 April 2012	E.coli count per 100ml	6	Unresolved
16 May 2012	E.coli count per 100ml	130	Unresolved
LOTUSVILLE@ABERDEEN ECCMAB-002			
DATE	DETERMINANT	VALUE	STATUS
21 February 2012	E.coli count per 100ml	95	Unresolved
14 March 2012	E.coli count per 100ml	130	Unresolved
10 April 2012	E.coli count per 100ml	2	Unresolved
17 October 2012	E.coli count per 100ml	15	Resolved
14 November 2012	E.coli count per 100ml	1	Unresolved

GRAAF-REINET WTW FINAL WATER @ GRAAF-REINET ECCMGA-007			
DATE	DETERMINANT	VALUE	STATUS
14 March 2012	E.coli count per 100ml	< 10	Unresolved
10 April 2012	E.coli count per 100ml	< 10	Unresolved

PORTABLE WATER EXAMINATION @ GRAAF-REINET ECCMGA-006			
DATE	DETERMINANT	VALUE	STATUS
14 March 2012	E.coli count per 100ml	1	Unresolved
16 May 2012	E.coli count per 100ml	1	Unresolved
18 December 2012	E.coli count per 100ml	2	Unresolved

KOEBERGVILLE SPORTS STADIUM TAP @ GRAAF-REINET ECCMGA-005			
DATE	DETERMINANT	VALUE	STATUS
14 November 2012	E.coli count per 100ml	1	Unresolved

OFFICE TAP @NIEU-BETHESDA ECCMNB-001			
DATE	DETERMINANT	VALUE	STATUS
16 MAY 2012	E.coli count per 100ml	2	Unresolved
14 November 2012	E.coli count per 100ml	3	Unresolved
18 December 2012	E.coli count per 100ml	2	Unresolved

Health failures in Camdeboo LM in 2013:

GRAAF-REINET WTW FINAL WATER @ GRAAF-REINET ECCMGA-007			
DATE	DETERMINANT	VALUE	STATUS
16 January 2013	E.coli count per 100ml	9	Unresolved
PORTABLE WATER EXAMINATION @ GRAAF-REINET ECCMGA-006			
DATE	DETERMINANT	VALUE	STATUS
17 April 2013	E.coli count per 100ml	3	Unresolved

OFFICE TAP @NIEU-BETHESDA ECCMNB-001			
DATE	DETERMINANT	VALUE	STATUS

In 2014 only one health failure recorded:

LOTUSVILLE@ABERDEEN ECCMAB-002			
DATE	DETERMINANT	VALUE	STATUS
08 January 2014	E.coli count per 100ml	46	Unresolved

Chemical determinant failures in Camdeboo for 2012:

### 1. Aberdeen Water Supply System

ABERDEEN PUBLIC TAP @ABERDEEN ECCMAB-001			
DATE	DETERMINANT	VALUE	STATUS
10 April 2012	Chloride as Cl mg/l	391	Unresolved (SANS 0241 – 2011 max limit 300mg/l)

  

LOTUSVILLE@ABERDEEN ECCMAB-002			
DATE	DETERMINANT	VALUE	STATUS
10 April 2012	Chloride as Cl mg/l	536	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
10 April 2012	Sodium as Na mg/l	204	Unresolved (SANS 0241 – 2011 max limit 200mg/l)
17 October 2012	Chloride as Cl mg/l	340	Unresolved (SANS 0241 – 2011 max limit 300mg/l)

### 2. Graaf-Reinet Water Supply System

UMASIZAKHE CLINIC TAP@GRAAF-REINET ECCMGA-002			
DATE	DETERMINANT	VALUE	STATUS
17 October 2012	Sodium as Na mg/l	306	Unresolved (SANS 0241 – 2011 max limit 200mg/l)
17 October 2012	Chloride as Cl mg/l	377	Unresolved (SANS 0241 – 2011 max limit 300mg/l)

### 3. Nieu-Bethesda Water Supply System

In the BDS no recorded chemical determinant failure at Nieu-Bethesda.

LOTUSVILLE@ABERDEEN ECCMAB-002			
DATE	DETERMINANT	VALUE	STATUS
16 January 2013	Conductivity Ms/m	179	Unresolved (SANS 0241 – 2011 max limit 170 Ms/m)
16 January 2013	Chloride as Cl mg/l	343	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
17 April 2013	Chloride as Cl mg/l	427	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
17 April 2013	Conductivity mS/m	198	Unresolved (SANS 0241 – 2011 max limit 170 Ms/m)
10 July 2013	Sodium as Na mg/l	233	Unresolved (SANS 0241 – 2011 max limit 200mg/l)
10 July 2013	Chloride as Cl mg/l	399	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
10 July 2013	Total Dissolved Solids mg/l	1230	Unresolved (SANS 0241 – 2011 max limit 1200mg/l)
10 July 2013	Conductivity mS/m	212	Unresolved (SANS 0241 – 2011



			max limit 170 Ms/m)
GRAAF-REINET WTW – FINAL WATER @GRAAF-REINET ECCMGA-007			
DATE	DETERMINANT	VALUE	STATUS
16 January 2013	Conductivity mS/m	177	Unresolved (SANS 0241 – 2011 max limit 170 Ms/m)
16 January 2013	Chloride as Cl mg/l	321	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
LOTUSVILLE@ABERDEEN ECCMAB-002			
DATE	DETERMINANT	VALUE	STATUS
8 January 2014	Conductivity Ms/m	209	Unresolved (SANS 0241 – 2011 max limit 170 Ms/m)
8 January 2014	Chloride as Cl mg/l	374	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
8 January 2014	Sodium as Na mg/l	203	Unresolved (SANS 0241 – 2011 max limit 200mg/l)
24 April 2014	Conductivity mS/m	261	Unresolved (SANS 0241 – 2011 max limit 170 Ms/m)
24 April 2014	Total Dissolved Solids mg/l	1514	Unresolved (SANS 0241 – 2011 max limit 1200mg/l)
24 April 2014	Chloride as Cl mg/l	509	Unresolved (SANS 0241 – 2011 max limit 300mg/l)
24 April 2014	Sodium as Na mg/l	256	Unresolved (SANS 0241 – 2011 max limit 200mg/l)

Ikwezi Local Municipality

Health Failures 2012

MARURITIUS TAP @JANSVILLE ECIMJA-002			
DATE	DETERMINANT	VALUE	STATUS
25 January 2012	E.coli count per 100ml	2	Unresolved
PHUMLANI TAP@JANSEVILLE ECIMJA-004			
DATE	DETERMINANT	VALUE	STATUS
12 December 2012	E.coli count per 100ml	118	Unresolved
FUTURE SP@JANSEVILLE ECIMJA-003			
DATE	DETERMINANT	VALUE	STATUS
9 July 2012	E.coli count per 100ml	2	Unresolved
28 September 2012	E.coli count per 100ml	2	Unresolved
29 October 2012	E.coli count per 100ml	89	Unresolved

IKWEZI WORKSHOP@ KLIPPLAAT ECI KKP-006			
DATE	DETERMINANT	VALUE	STATUS
25 January 2012	E.coli count per 100ml	2	Unresolved

WOLWEFONTEIN TAP 1 @ WOLWEFONTEIN ECDMWF-001			
DATE	DETERMINANT	VALUE	STATUS
29 October 2012	E.coli count per 100ml	2	Unresolved
29 November 2012	E.coli count per 100ml	10	Resolved
WOLWEFONTEIN TAP2 @ WOLWEFONTEIN ECDMWF-002			
DATE	DETERMINANT	VALUE	STATUS
28 September 2012	E.coli count per 100ml	2	Unresolved
29 October 2012	E.coli count per 100ml	6	Unresolved

29 November 2012	E.coli count per 100ml	14	Resolved
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In 2013, health failures include:

MARURITIUS TAP @JANSVILLE ECIMJA-002			
DATE	DETERMINANT	VALUE	STATUS
18 December 2013	E.coli count per 100ml	6	Unresolved
BRICKSFIELD TAP@JANSEVILLE ECIMJA-001			
DATE	DETERMINANT	VALUE	STATUS
29 August 2013	E.coli count per 100ml	11	Unresolved
18 December 2013	E.coli count per 100ml	2	Unresolved

BRANDOVALE TAP @ KLIPPLAAT ECIKKP-006			
DATE	DETERMINANT	VALUE	STATUS
30 September 2013	E.coli count per 100ml	5	Unresolved
IKWEZI WORKSHOP @ KLIPPLAAT ECIKKP-006			
DATE	DETERMINANT	VALUE	STATUS
30 September 2013	E.coli count per 100ml	2	Unresolved
ZAKHELE TAP @ KLIPPLAAT ECIKKP-008			
30 September 2013	E.coli count per 100ml	9	Unresolved

WOLWEFONTEIN TAP.1@ WOLWEFONTEIN ECDMWF-001			
DATE	DETERMINANT	VALUE	STATUS
30 January 2013	E.coli count per 100ml	2	Unresolved
30 September 2013	E.coli count per 100ml	6	Unresolved
26 November 2013	E.coli count per 100ml	1	Unresolved
WOLWEFONTEIN TAP 2@ WOLWEFONTEIN ECDMWF-002			
DATE	DETERMINANT	VALUE	STATUS
30 January 2013	E.coli count per 100ml	6	Unresolved
30 September 2013	E.coli count per 100ml	12	Unresolved
18 December 2013	E.coli count per 100ml	6	Unresolved

In 2014, health failures in Ikwezi LM include:

MARURITIUS TAP @JANSVILLE ECIMJA-002			
DATE	DETERMINANT	VALUE	STATUS
30 September 2014	E.coli count per 100ml	5	Unresolved
TOWN AREA TAP@JANSEVILLE ECIMJA-005			
DATE	DETERMINANT	VALUE	STATUS
30 September 2014	E.coli count per 100ml	9	Unresolved
TOWN AREA TAP @ KLIPPLAAT ECIKKP-003			
DATE	DETERMINANT	VALUE	STATUS
26 February 2014	E.coli count per 100ml	5	Unresolved
ZAKHELE TAP@KLIPPLAAT ECIKKP-008			
DATE	DETERMINANT	VALUE	STATUS
26 February 2014	E.coli count per 100ml	5	Unresolved