



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

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MINISTER OF WATER AND SANITATION

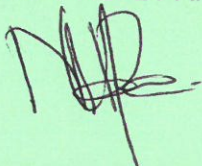
NATIONAL COUNCIL OF PROVINCES: QUESTION ★93 FOR ORAL REPLY

A draft reply to the above mentioned question asked by Mr J W W Julius (Gauteng: DA) is attached for your consideration.


DIRECTOR-GENERAL

DATE: 26/08/2016

DRAFT REPLY APPROVED/AMENDED



MRS NP MOKONYANE
MINISTER OF WATER AND SANITATION

DATE: 27.08.16

NATIONAL COUNCIL OF PROVINCES

FOR ORAL REPLY

QUESTION NO ★93

DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 16 AUGUST 2016
(INTERNAL QUESTION PAPER NO. 16)

★93. Mr J W W Julius (Gauteng: DA) to ask the Minister of Water and Sanitation:

- (1) What is the state of (a) functionality and (b) maintenance of the Rooiwal Water Treatment Plant in Hammanskraal;
- (2) whether she has been informed of the sewage overflow from the Water Treatment Plant; if not, what is the position in this regard; if so what are the relevant details?

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REPLY:

- (1)(a) The Rooiwal WWTW is organically and hydraulically overloaded. The Chemical Oxygen Demand (COD) concentration, an indicator of organic loading on a works, has increased beyond the original design concentration. This is due to a combination of increased flows due to population growth in the drainage area as well as increased industrial flows received at the works. A direct expression of overloading is production of excess sludge as incoming sewage is degraded and this poses management challenges.

Normally an organically overloaded sewage treatment works would produce a substandard effluent quality and most notably the following:

- Poor removal of ammonia,
- partial oxidation of COD,
- improved phosphate removal (assuming increased readily biodegradable COD),
- low nitrate levels owing to incomplete nitrification (under-aeration),
- high mixed liquor suspended solids (MLSS) concentration in the bioreactors,
- high sludge blankets in the clarifiers,
- High suspended solids concentration due to high solids loading on the secondary settling tanks and
- Poor final effluent disinfection.

- (1)(b) The sludge problems affect the functionality of the sludge management and inadequate digestion infrastructure leads to fly and odour production which affect operation and maintenance of the plant.

The two dewatering plants cannot accommodate all sludge produced on-site. In addition, the dewatering plant installed for the anaerobically digested sludge is old and prone to breakages. This leads to intermittent operations and at times, disposal of sludge on open lands during periods of prolonged downtime (as is currently the case). The spares necessary to resume operations have been ordered with the supplier and were expected to be delivered by 10 August 2016. The spares are manufactured to order and thus not shelf items, which is the cause for delays. To prevent recurrence, a contractor will be appointed to supply spares under tender no (SID WS 16 2015/16).

The wash water system for the dewatering presses is also out due to cable theft. The materials required for repairs have been procured and ready to be installed. The installation will be timed to coincide with the repairs of the dewatering plant to keep cables live and energized at all times.

Continued operation relies on repair and maintenance of electrical and mechanical equipment used on-site. The following tenders are in place to ensure infrastructural maintenance.

Contract Reference number Validity:

- Tender for the repair of centrifugal pumps is CB 157/2013 October 2017
- Tender for repair of medium voltage equipment SID WS 10 2014/15 June 2019
- Tender for the maintenance of flow meters and dissolved oxygen meters CB 57/2013 August 2017
- Tender for the repair and maintenance of inlet works SID WS 05 2014/15 November 2018

- (2) Yes, since the challenges in Rooivaal were noted by my Department there has been full engagement with the City Manager and an Action plan was developed. My Department is monitoring implementation thereof. The last monitoring meeting was held on 20 July 2016.

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