



## water affairs

Department:  
Water Affairs  
REPUBLIC OF SOUTH AFRICA

MINISTRY OF WATER AND  
ENVIRONMENTAL AFFAIRS

2010 -04- 08

PRIVATE BAG X313  
PRETORIA 0001

Enquiries: H Smit  
Telephone: 012-392-1301  
Reference: 16/2/7/2/20

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

NATIONAL ASSEMBLY: QUESTION 970 FOR WRITTEN REPLY

A draft reply to the above-mentioned question asked by Mr G R Morgan (DA); is attached for your consideration.

DIRECTOR-GENERAL (Acting)  
DATE: 7/4/10

DRAFT REPLY APPROVED/AMENDED

MS B P SONJICA, MP  
MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS  
DATE: 13. 04. 2010

NATIONAL ASSEMBLY

FOR WRITTEN REPLY

QUESTION NO 970

DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 30 MARCH 2010  
(INTERNAL QUESTION PAPER NO. 9)

970. Mr G R Morgan to ask the Minister of Water and Environmental Affairs:

- (1) With reference to the launch of a water treatment project to mitigate acid mine drainage on 18 March 2010, when (a) was the problem of acid mine drainage in the vicinity of the project first identified by her department and (b) did the first decant of acid mine drainage occur in this area;
- (2) whether the treatment project will deliver water of drinking standard; if not, why not; if so, what are the relevant details;
- (3) why were potable reverse osmosis plants not considered for this project;
- (4) whether any remediation measures will be undertaken to remedy the water courses, most notably the Robinson Lake; if not, why not; if so, what are the relevant details;
- (5) whether the unqualified volume of acid mine drainage which is flowing subsurface into the Zwartkrans compartment will be dealt with; if not, why not; if so, how?

NW1113E

---00000---

REPLY:

- (1)(a) My Department was first sensitised to predictions of acid mine drainage (AMD) prior to 2002. However, large-scale cessation of mining operations and the absence of mine closure policies have hampered efforts to address the predictions relating to a possible decant of AMD.
- (1)(b) The first decant of AMD in the West Rand occurred during September 2002.
- (2) Due to the technology being utilised, the current treatment plants do not produce water of potable standard. Instead, it focuses on adjusting pH values and the concentrations of heavy metals to within acceptable ranges. The medium to longterm plan for AMD treatment will consider strategies that attempt to deliver water of potable standard.
- (3) In view of the urgency of the situation, reverse osmosis technology could not be considered due to the lengthy timeframes in commissioning such a facility. Additionally, this strategy would be encumbered by very high costs.
- (4) A remediation plan for the Tweelopies Spruit is proposed for discussion with the relevant mines. A pilot plant for remediating Robinson Lake, both in terms of water and sediment is currently in process. The pilot plant investigations are scheduled for completion by the end of 2010.

- (5) Subsurface migration of mine void water into the Zwartkrans compartment is not yet fully quantified. However, the emergency intervention measure seeks to reduce the quantity of untreated AMD, as well as improve the quality of water that may enter the compartment.

---00000---