

NATIONAL ASSEMBLY

FOR WRITTEN REPLY

QUESTION NO 540

DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 20 MARCH 2008
(INTERNAL QUESTION PAPER NO 10)

540. Mrs D van der Walt (DA) to ask the Minister of Water Affairs and Forestry:

- (1) Whether microcystin levels are routinely tested in South Africa's water; if not, why not; if so, what are the relevant details;
- (2) whether there is any acceptable level of microcystin in water; if not, what measures are being taken to mitigate against microcystin; if so, (a) what are the relevant details and (b) what are the principal causes of microcystin in water;
- (3) whether the levels of microcystin in the water of the Hartebeespoort Dam have at any time since 1 January 2005 required waterskiing to be ceased on the dam; if not, how was this conclusion reached; if so, what are the relevant details?

NW1186E

---0000---

REPLY:

- (1) Yes. Freshwater resources are routinely tested for microcystin at a number of eutrophic sites in South Africa. These include monitoring done by the Department and water boards and municipalities that purify drinking water. In addition, 80 sites are monitored by my Department for the broader cyanobacteria genera (microcystin is produced by the cyanobacterium *Microcystis*) as part of the National Eutrophication Monitoring Programme.
- (2) Yes, there are acceptable levels of microcystin in water that would still render it fit for specific uses. The major drinking water industries do test for microcystins and do take the necessary precautions to provide safe (fit for use) drinking water to users. Where contact water recreation activities are concerned, the World Health Organisation (WHO) [1999] established three hazard levels against which water users can assess the danger posed by cyanobacteria and the recommended actions that should be taken. At unacceptable levels of cyanobacteria, the use of water has to be prohibited and warnings have to be erected at the sites.
- (2)(a) There are ways to mitigate against cyanobacteria. These include preventing the blooms through affecting proactive source directed controls.

- (2)(b) The cyanobacteria blooms propagate on excessive nutrients in the water and the blooms further proliferate during the warmer months. The microcystin toxins are released once they start degrading.
- (3) No. Such a step has not been necessary at any time since 1 January 2005 as the levels of microcystin have not required such actions.