



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

MINISTRY OF WATER AND
ENVIRONMENTAL AFFAIRS

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MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

NATIONAL ASSEMBLY: QUESTION 2974 FOR WRITTEN REPLY

A draft reply to the above-mentioned question asked by Mrs H N Ndude (Cope); is attached for your consideration.

ACTING DIRECTOR-GENERAL

DATE: 13/12/2010.

DRAFT REPLY APPROVED/AMENDED

MRS B E E MOLEWA, MP
MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

DATE: 2010/12/14

NATIONAL ASSEMBLY

FOR WRITTEN REPLY

QUESTION NO 2974

DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 22 OCTOBER 2010
(INTERNAL QUESTION PAPER NO. 32)

2974. Mrs H N Ndude (Cope) to ask the Minister of Water and Environmental Affairs:

Whether her department is assisted by organisations or companies that research sophisticated technologies to treat the effects of increasing pollution; if not, why not; if so, (a) who are these organisations or companies, (b) what is the cutting edge research that has been conducted and (c) how will this be used in combating pollution? NW3667E

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REPLY:

- (1) Yes, the Department is assisted by organisations that conduct research in treatment technologies used to treat the effects of pollution.
- (a) The Water Research Commission (WRC) of South Africa is the main organisation that leads and coordinates research under what is called "water supply and treatment technology". Other organisations, universities and experts contribute through projects that are funded through the WRC.
- (b) Examples of the cutting edge research projects that have been conducted are, among others, the following:
- The testing of a membrane technology unit for the removal of nitrate, chloride, phosphate and sulphate pollutants from groundwater.
 - The development of immersed membrane microfiltration systems for treatment of rural waters and industrial waters.
 - The defouling of membranes by moving magnetic dipole polymer beads containing nano magnetic particles, in a scouring motion across the membrane using external magnetic fields.
 - Development of 3 durable and reliable wave-energy reverse osmosis pumps.
- (c) The outcome of these research projects will be used to improve treatment at waste water treatment facilities. This will provide an opportunity for re-use of waste water, which in turn means no discharge of waste water into the environment.

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