

NATIONAL ASSEMBLY

QUESTION 2132

QUESTION FOR WRITTEN REPLY

2132. Mr G R Morgan (DA) to ask the Minister of Energy:

- (1) Whether the National Nuclear Regulator (NNR) has any ongoing programmes in place to monitor radioactive exposure to communities in the (a) West and (b) far West Rand areas from (i) surface water, (ii) groundwater, (iii) wind blown dust, (iv) radon in the air and (v) acid mine drainage; if not, why not; if so, what are the relevant details;
- (2) Whether there has been any epidemiological study in the Wonderfonteinspruit area to assess the risks of radiation transmitted by all pathogens on human health; if not, why not; if so, what are the relevant details;
- (3) whether the NNR has any plans in place to prevent radioactive exposure to communities who use contaminated materials and mine residue as construction materials; if not, why not; if so, what are the relevant details? NW2572E

Answer

- (1) (a) & (b) (i-iv) The NNR undertakes ongoing independent monitoring and compliance assurance activities in the West and Far West Rand area. This is as a result of the Certificates of Authorisation (COR) issued to various mining companies that handle radioactive materials who operate in the West and Far West Rand. All COR holders are required to undertake environmental monitoring as their condition of authorization. The NNR has also undertaken independent verification of these monitoring programmes.

(v) The process of Acid Mine Drainage is primarily chemical in nature. The Department of Water Affairs is the lead regulator on this matter and brings in other relevant entities of government. The NNR participates in a joint task team, to monitor potential radiological impacts on the environmental in the West and Far West Rand resulting from acid mine drainage.
- (2) The NNR has not conducted an epidemiological study of the Wondersfonteinspruit area as a narrowly defined study focusing on only radiation, excluding chemical contamination and other possible contaminants might not lead to representative result. A proper study, if and when undertaken must include several institutions and possibly be lead by the Department of Health.

- (3) The use of contaminated materials and mine residue as construction materials where there is a risk of potential radon build-up is prohibited by the NNR requirements. The authorization holders apply to the NNR when they have a desire to release these materials but the NNR does not approve the release of these materials if the reason for release is for the construction of roads and other constructions which can result in the build-up of radon such as, but not limited to, residential dwellings, offices, etc. . The NNR approves release of such materials, e.g. Waste rock only for use as aggregate in the construction of roads. The release of the waste rock is further subject to the establishment of a system of control to be approved by the NNR, to ensure that the waste rock which is released is below the regulatory limit of 0.5Bq/g.