



MINISTRY OF ENERGY
REPUBLIC OF SOUTH AFRICA

National Council of Provinces Question: 66

Mr D B Feldman (COPE-Gauteng) to ask the Minister of Energy:

Whether her department has investigated the recent revelations of radiation levels at Tudor Shaft in Gauteng (details furnished); if not, what is the position in this regard; if so, what are the relevant details? CW114E

REPLY:

The department of Energy does not carry out such physical investigations. This is the mandate of the National Nuclear Regulator (NNR) in terms of the National Nuclear Regulator Act, Act 47 of 1999. The NNR has conducted high level radiological surveillance of the upper Wonderfonteinspruit Catchment Area (WCA). The surveillance was conducted as part of an initial characterisation and prioritisation process to determine if there was any exposure to harmful radiation at the locations visited and to prioritise further radiological characterisation studies.

This surveillance also served to inform the NNR on whether preventative actions and control measures were required, and if so to what extent these measures would be needed to ensure that members of the public are adequately protected from any harmful exposures as a result of ionising radiation. In total, ten (10) sites located in the Krugersdorp and the Randfontein area were identified and inspected by the NNR. The areas and sites visited are situated in close proximity to tailings dams.

The sites inspected are Tudor Dam, Tudor Shaft Informal Settlement, North Sand tailings dam close to the intersection of Windsor Road and Paardekraal road, the low cost housing township called Sinqobile, a housing complex called Amberfield, the

Krugersdorp Game Reserve, Robinson lake, Donaldson Dam, a rehabilitated tailings dam in Kagiso, and the surrounds of Kagiso.

The NNR took a conservative approach, in line with their mandate of protection of people and made the following recommendations to the local municipality and the general public:

Consideration to possibly relocate inhabitants from the Tudor Shaft informal Settlement area as a precautionary measure due to what appeared to be slightly elevated levels of radiation. However, given the standard regulatory levels of public exposure, the NNR determined that there was no imminent danger to the public although consistent exposure over time could be an issue, hence the recommendation for the relocation of this settlement. A detailed and further characterization of the area will still be undertaken with a view to determining the exact levels and possible remediation strategies. In addition to the recommendation for relocation of this settlement, the NNR recommended that the following precautionary measures be implemented in all of the affected areas:-

- As far as possible, children must avoid swallowing sand when playing outside.
- Make sure children always wash their hands before eating.
- Do not swim in open dams and ponds.
- Avoid using water found in neighbouring for domestic use
- Try to avoid playing outside when it is windy
- Avoid sweeping outside when children are nearby.
- During raining periods make sure that mud is not carried into the dwelling area.
- Make sure that dwellings are well ventilated.

The NNR continues to closely monitor the situation to ensure that there are adequate mechanisms for the protection of the public from any potential harmful effects arising from ionising radiation. To this end, the NNR is working with the Steering Committee which is looking at rehabilitation of the WCA area which Committee incorporates a number of stakeholders. The WCA situation has other issues of concern such as chemical toxicity and chemical contamination of water streams. The Committee is providing a holistic rehabilitation process in this regard.