

PEER REVIEW REPORT ON THE AGRICULTURAL IMPACT ASSESSMENT PREPARED AS PART OF THE NUCLEAR-1 EIA

REPORT PREPARED BY:

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8. Report on whether normal standards of professional practice and competence have been met.

CONCLUSIONS

I find that for almost all of the points listed above, the report is satisfactory. It is reasonably well written and fairly logical. However, I have a few comments:

- For the soil characterisation component, there seems to have been some confusion about the mapping units used. The basic unit (at 1:250 000 scale) is the **land type**, where for each land type, the soils are listed with their expected occurrence and properties. Each land type falls into a specific **broad soil pattern**, so that these can be combined to form a map with broad trends (eg sands, red soils, vertic clays etc). These broad soil patterns can also be somewhat aggregated into **generalised soil pattern units**, which have the lowest level of detail and cannot be used for agricultural potential determinations. This is what was used in Figures 2-8 to 2-10. The idea of this report is a summary, desk-top study and is mainly concerned with agricultural production, so it is possibly not too serious. However, it seems as if the compiler mis-interpreted the soil data.

- One of the main aspects concerns dust generation. In order to make such recommendations, a 7-fraction particle size soil analysis should be done, so that the specific percentage of fine grade soil particles (which are more likely to be detached and carried by wind action) can be assessed. This is missing from the few soil analysis results given in Appendix 2, and no results are given for Duynefontein. The locality of the soil sample sites are not shown, nor are the relation to the prevailing wind direction.
- I am not an expert on agricultural economics, so I can't comment on all the details of the economic analysis of the farming operations, but the conclusions seem to be borne out by the soil/climatic conditions that occur in each of the three areas.

RESPONSE FROM SPECIALIST TO POINTS RAISED

The author only used generalised soil information for land classification as that was all that was available. The author does not believe the data and the detail of the data have been misinterpreted. However, the dust referred to would come from a gravel road (not the farm lands) so the soil classification of the lands is not relevant.

- The actual soil samples were taken from within the footprint of the actual plant (as this is the only area that would be taken out of potential agricultural production (as you know there is no production at the moment))