

ADDENDUM TO PERMIT APPLICATION FOR KUDUMANE RESOURCES (PTY) LTD

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You are correct in assessing that the stromatolite structures found in outcrop is very small and I would not recommend collecting those. The reason for application to collect stromatolites during the mining phase is that it can be expected to find well defined structures. It is very difficult for me to assess from present information on how important the stromatolites will be?

The permit application is therefore more pre-empting the discovery of stromatolites than knowing for sure that they will be present. The practical implications for the mining operation is that the Environmental Control Officer should be aware of the possibility of cutting through stromatolites and my intention with the destruction permit is to ensure that the client is aware of the possibility of finding stromatolites and if so, by collecting a representative sample we will have a record of the fossil structures. Taking into account that the structures are already recorded in the Phase I study you might decide to issue a destruction permit.

There is unfortunately now way to predict what they will find during the mining operation and the outcrops I looked at is quite a distance from the actual mining site. If you feel that this precaution of destruction of the stromatolites is not necessary, then it is only necessary to issue the client with a destruction permit. In general the mining operations should cut the dolomite and banded iron formation just before they reach the manganese ore body. If there are no stromatolites they just move on, but if they observe stromatolites (known to the local geologists as "algal structures") they must collect a representative sample and destroy the rest. I took 1m³ as a representative entity of rock.

Hope this explanation clarifies this issue. Do you want me to put this explanation into the permit documentation?

Thank you for your request for clarity.

Gideon Groenewald