

HAMILTON FIELD NATURALISTS CLUB



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29 Jan 2002

Panels Victoria
Department of Infrastructure
Level 11
Nauru House
80 Collins St, Melbourne 3000

Re. BASIN MINERALS LIMITED – Douglas Mineral Sands project EES

We wish to comment on this project proposal. While we do not oppose the general idea of mining farmland in the area, elements of the plan need much more attention, in order to avoid unwanted environmental consequences. Our comments are as follows:

Stage 1 concept

Basin Minerals (BM) has stated, in print and at a public meeting in Hamilton, that the viability of Stage 1 does NOT rely on an expectation of gaining access to Crown land Reserves in Stage 2. That point should be made explicit if the State grants permit to mine in Stage 1. It would be naive to believe that BM did not think that, once started, that they could pressure Shires and State Government to grant access to Crown Reserves that contain native vegetation that is precious to this region, in order to expand their operations. We note that the northern boundaries of Stage 1 run into *Red Hill* and *Little Youngs State Forest* – part of Stage 2 – and that further north the strand lines run across parts of *Jilpanger Flora and Fauna Reserve*. We are acquainted with these areas and are most concerned that their viability is threatened by this project.

It would not be possible to recreate the suite of species on strip-mines through those reserves – the best one could hope for is to replant a few of the large species, and that some of the more common minor species (rather than just alien weeds) might re-colonise from adjacent areas.

For the State to allow future expansion into those areas – to overturn its own native vegetation retention regulations that protect many threatened/rare/vulnerable species and plant species and communities, and several bird and other animal species – would be to pay too high a price for development that could proceed elsewhere. We note that mineral sand deposits have been found at several other locations – and not all by BM – and there is no indication that there is/will be a shortage that could excuse such a violation of trust.

The State should have insisted that Stage 1 and Stage 2 of the proposal be considered together, to resolve this matter at the outset. We are aware of the arguments put by BM as to why they have not done so. Part of that argument was that, to wait for Federal legislation that relates to listed fauna and flora on Crown Lands, would delay the project and thus perhaps render it less profitable.

Tree clearance and replacement ratios in Stage 1

The approach suggested by BM is not adequate.

- **Tree loss/replacement ratios** – some 690 trees, mostly mature river red gums with hollows, are to be bulldozed – the suggestion is that these can be replaced by a mere 15 seedlings per tree removed. That is a ludicrous position and one that must be altered. Clearly, it is not feasible to immediately get a suitable replacement for the loss if so many old trees but there must be a real effort to ensure that, in the long term there is a positive gain from any restitution AND that the penalty imposed is a real disincentive to token (and trivial) solutions towards replacing a rare resource. That approach has been advocated by several groups in 2001 planning for NRE's

Native Vegetation Retention plans. Accordingly, a realistic replacement ratio must be at least 1000 trees for every large tree lost. That represents about one hectare of land needed for replanting each large tree lost – or about 690 ha if all the trees are mature.

- *Replacement areas* – to accomplish the necessary planting BM would need to acquire part of the land that they will be mining, since the landholders are unlikely to want cropping land stocked with trees.
 - BM could acquire and revegetate the mined and reformed strandlines, a process that could allow a rise in elevation to accommodate the mined earth, thereby solving one of their disposal problems.
 - Alternatively, or in addition, BM could acquire some of the many good (mostly ephemeral) wetlands in the area that the farmers currently do not crop, together with a buffer around, and plant those areas. That would achieve some constructive long-term results.
- *Loss of Allocasuarina luehmannii (buloke) stands* – these trees, and associated rare grassland flora, are at risk. One good stand, in particular, should not be permitted to be removed. This is a vulnerable species and the present rarity may also account for the increasing rarity of the red-tailed black cockatoo. Where trees are removed in other areas, positive efforts must be made to establish viable populations – that means fencing off to allow control of grazing stock.
- *Replacement of hollows* – the suggested approach by BM seems to be inadequate. Cutting off one hollow from a tree that has been bulldozed and then affixing it (probably ineffectually in the long term) to another tree somewhere else may be ineffective. While some hollows used by red-tailed black cockatoos may be substituted for those lost, that ignores other hollow-users (e.g. bats, birds and tuans). Has any thought been given to re-locating the (by then presumably dead) *key* trees to a position where it can still function as a nesting site? This approach has been used by landholders when re-locating dead trees onto island dams. A back-hoe is used to dig the hole and the sawn-off tree is “replanted”.

Water issues

There are a number of questions that arise over the question of water.

- Unclear as to how the required amount of water can be made available in the time frame suggested, bearing in mind that there is very little in storage now and savings from piping water in the Wimmera-Mallee system are far off and, in any case, have to be shared with other users and for environmental flows in the Glenelg River. BM has not given any indication as to the effect of their “allocation” on other water-users or the environment. They should be required to do so.
- Unclear as to the likely impact of the suggested “water harvesting” process on the health of the Glenelg River.
- Unclear as to the precise fate of groundwater seepage resulting from the mining.

Yours faithfully

Dr PR Bird
Secretary
Hamilton Field Naturalists Club