

Thursday 7th November , 2013

Mark Howe
Mining Regulation and Rehabilitation Branch
DMITRE
GPO Box 1264
Adelaide SA 5001
Email: dmitre.miningregrehab@sa.gov.au

Dear Mark,

Re: Submission about the Mining Lease Proposal for the Hillside Copper Mine proposed by Rex Minerals.

Please find attached a submission about the Mining Lease Proposal (MLP) for the Hillside Copper mine proposed by Rex Minerals near Ardrossan on the Yorke Peninsula.

Here are some of our concerns:

Waivers/Agreements Status Table 1.

Proposed MPL (Corridor), V.S. Clift 1.3ha Agreement expected August 2013.

This agreement has not been reached.

Although I cannot speak for the other landowners, to my knowledge no other agreements for the MPL have been reached. This needs to be investigated before the license is granted as Rex may need an alternative to transport the concentrate to the port.

Agriculture

We are not in the Mining Lease Proposal but are neighbouring it.

Dust

*In the MLP Section 8:-38 **Reduced agricultural crop growth rates/yields from increased dust deposition on leaves***

*There is some evidence that dust can inhibit light transferral to leaves, and therefore slow the rate of photosynthesis and plant growth. Without dust controls in place it is considered **possible** that increased*

*dust deposition on the leaves of crops could have a negative effect on growth and yield with **minor** consequences on in surrounding properties thus a **moderate** primary risk. Following implementation of the control measures outlined above it is considered **unlikely** that there will be any impacts on crops and therefore **low** residual risk.*

This shows the impact of high levels of dust will be negative to farming. Real time dust monitoring is essential. Two water trucks will not be sufficient to suppress the road dust of 60 haul trucks. How will the dust be suppressed from the waste dumps before they are revegetated. Will the composition of the dust be tested? If so by Who and how often? Copper is toxic to our crops and livestock.

Here is a letter from our agronomist Craig Davis of AW Vater & Co in response to a question of the effects of copper on our existing farming operations.

Hi Andrew,

As discussed.

There are examples of where excess levels of copper dust/ore have caused plant health issues, the closest one that comes to mind is out of the Moonta mines. The ore tracks that were used for transporting the ore trucks have had an accumulation over time of copper ore.

Excess copper in the soil reduces the root growth of plants and hence can reduce overall crop growth. Also, symptoms of iron deficiency can also occur (same as with manganese and zinc toxicity).

In animals, copper toxicity can vary widely as there is a wide range of tolerance. Sheep are much more susceptible to toxicity than pigs or poultry for example. Also sheep, which often graze plants that contain toxic alkaloids (eg caltrop, potato weed) and have damaged livers, will have a much greater risk of copper toxicity occurring. The occurrence of copper toxicity in animals is caused more so by prolonged exposure to small amounts rather than acute (short term) toxicity.

Regards,

Craig Davis
Senior Agronomist
AW Vater & Co

[REDACTED]
[REDACTED]
[REDACTED]

Underground Water

The Hydrology report presented has drilled to insufficient depths. Any variation to the water table would be critical to our cropping program. This needs to be thoroughly investigated before any license is granted. Consultation with local farmers is imperative. This has not happened.

Road Closure

The closure of Redding Road will mean we will need to move farm machinery along Yorke Highway. This is less than ideal as:

1. It will slow traffic.
2. Slow traffic causes other road users to be impatient and take unnecessary risks

3. Safety barriers make the road too narrow.
4. Overhanging tree branches can be hit a fall on traffic or the road causing a hazard.

The alternative would be to travel 10km extra to use an alternative route. As there is an escort vehicle in front and one behind a piece of machinery, in harvest this can be up to 5 trips. This would mean an extra 150km in a move. Time is critical during harvest.

The Perception Survey

Section 7 MLP

The Community Consultative Group (of which I am a member) completed a survey in July 2012. The first meeting of the CCG was in February 2012. Terms of reference, election of chair and DMITRE explained our role. The survey was completed in our *third* meeting after this. I did not know this survey was to hold such significance in the MLP. I have discussed this with other CCG members and they agree with me. This is in the CCG's submission. Since this survey was undertaken the size of the mine footprint has increased. I believe this survey was undertaken so that Rex could report that they had consulted with the community. This consultation was not sufficient.

Neighbouring Properties

5.3.1 Residential Dwellings

Within the proposed ML, three houses and associated farm sheds occur on land currently owned by Rex.

There are a further five dwellings located within the proposed ML. Of these five dwellings, one residence

is unoccupied, one has a negotiated relocation agreement in place and negotiations are underway for

Rex to purchase or relocate a further two residences (see Section 2.3). The fifth is likely to remain as an

occupied residence for the duration of the Hillside Project. For the purposes of assessing potential social

and environmental impacts, the four dwellings which are either currently unoccupied or under negotiation

have not been considered as sensitive residential dwellings. The fifth dwelling remains a sensitive receptor.

5.2.5

The following principles relate to separation treatments, buffers and landscaping:

7 Mining development should be sited, designed and sequenced to protect the amenity of surrounding

land uses from environmental nuisance such as dust or vibration emanating from mining operations.

8 Mining operations that are likely to impact upon the amenity of the locality should incorporate a separation distance and/or mounding/vegetation between the mining operations (including stockpiles) and adjoining allotments to help minimise exposure to those potential impacts.

9 Quarry faces should be orientated away from public view.

10 Screening of mining areas should occur in advance of extraction commencing.

11 An area of densely vegetated and/or mounded land should be established around the perimeter of mining sites in order to screen excavated land and mineral processing facilities from all of the

following:

- (a) residential areas
- (b) tourist areas
- (c) tourist routes
- (d) scenic routes.

In the proposed design of the mine there appears to be no bund or screen for the 5th resident. This landowner and his family have decided they wish to continue farming. They are entitled to protection from dust, noise, light and vibration from the mine. The western wall of the pit needs further investigation in order to provide this family regulation limits.

In conclusion we are told that farming and mining can co-exist. How can this be when Prime agricultural land is either being excavated or waste rock is being dumped on it? The prospect of rehabilitation to farming is unlikely. In this Mining Lease Proposal, it seems like the farming community is making all the compromises and Rex Minerals are not making any.

Carolyn and Andrew Cliff

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PINE POINT SA 5571

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