

7. LEASE/LICENCE CONDITIONS

7.1 Rainwater Tank Testing – Introduction and Background

The Hillside Mine Air Quality Management Plan (AQMP) and the relevant Section 5 – Environmental Outcomes and Monitoring, includes detailed information on the baseline environmental dust, sources of dust from the Hillside Mine, and a comprehensive set of dust control measures. These include both proactive controls, and monitoring based reactive control measures designed to minimise dust emissions from the site. These on-site ongoing control measures represent the first tier of protection to employees and surrounding communities. Refer to the AQMP Section 7 for details of these.

The Mining Lease conditions set by the DPC around dust compliance limits for the Hillside Mine are based on the most up to date review of the National Environment Protection Measures (NEPM) standards and the Environment Protection Act requirements. These standards incorporate the potential health effects of dust over the long term (ie over work lifetimes) on employees and surrounding communities, and hence our ML conditions are set based on these to ensure no detrimental impacts to health. Hence it is important to understand that any fugitive dust from the Hillside Mine will not present an instantaneous hazard to health.

Data from the proposed dust monitoring program will be used to determine the impact of the Hillside Mine on the surrounding environment and community, as well as inform reactive control measures through a series of trigger alerts. The monitoring proposed is comprehensive, involving real time monitors, 24 hour compliance monitors, mobile and temporary monitors, and dust deposition gauges – in all, between 14 and 18 dust monitors may be in place around the mine site at any one time. This detailed and comprehensive dust monitoring program around the lease and at nearby receptors (residences) represents the second tier of protection to surrounding communities and measures actual dust in the air or potentially settling onto the ground. (refer to Section 10 of the AQMP).

The dust monitoring results are the method by which compliance and management of the mine from a dust emission perspective will be maintained, and will provide an early warning of any increase or non-compliance in dust emissions.

During the ML assessment process, independent consultants engaged by both the Company and by the DPC determined that the quantum of copper or other metals in predicted dust will be at such low levels that they will not pose a risk to surrounding community health nor impact agricultural crops or livestock over the full life of the mine. A worst case scenario was used by these independent consultants to determine this, ie assuming all fugitive dust was ore dust containing 0.6% copper and 99.4% waste rock – rather than the normal average total dust which will contain even less copper. Baseline measurements carried out during the ML application process determined the levels of dust in the current environment around Hillside.

The testing of rainwater tanks in the region required by the ML condition is to demonstrate and confirm that there will be no significant impact on rainwater tank quality from any fugitive mine dust, nor by any metals that may be contained within that dust. Hence this is a third tier of protection for the surrounding community. The primary metals that will be measured from rainwater tank water samples will be copper and uranium, and these will be compared to allowable levels in Australian drinking water standards. While other trace metals exist in Hillside ore and waste rock, they are at extremely low levels in situ, and hence will not present a hazard in dust. No organics nor biologicals will be analysed as the Hillside Mine will not produce or impact these.

The 4km zone that is stated as the rainwater tank testing zone (refer Figure 7.1 below) as per Rex's Mining Lease conditions is more than adequate as supported by the dust modelling and likely extent of fugitive dust leaving the site. Annual testing is proposed and the timing of this will be consistent from year to year. Recommendation on best timing has been after the first significant rains following summer. As part of the ML condition Rex will offer rainwater tank testing to all residences containing a tank in the 4km area. However, it is important to understand that fugitive dust from mine operations disperses from the source as it moves away, and hence any dust may be detectable in the general area of direction and will be more dilute. Therefore testing of a range of rainwater tanks in an area will detect any change, and if individual tanks happen not to be tested (either due to owner not wishing this, or due to timing suitability) that does not represent a health concern.

It is anticipated that there will be some variability of analysed samples due to seasonal variation, and whether copper fittings are used on tanks (will be noted at time of sample collection).

Details of the process of notification of residences, response of residences back to Rex, and how and when samples will be collected and analysed are included in the Rainwater Tank Testing Procedure in Appendix 7.1.

Figure 7.1 - Hillside Mine rainwater tank testing zone

