

Dust Working Party Site Visit Report, Friday 22 January 2015

In attendance: Garry Duncan, Alistair Walsh, Carol Bailey, Bob Goreing, Lachlan Wallace, GM Kanmantoo Copper Mine, Catherine Davis, Environment Manager Kanmantoo Copper Mine

Purpose of the site visit

1. Pass on and follow up, recent community concerns about dust
2. Hear about and view, recent initiatives aimed at improving performance at the mine in relation to dust
3. Facilitate the flow of information on this topic to the wider community

Background

1. A number of dust complaints from the community since Christmas
2. A number of days in this time period where dust levels had spiked
3. Coincided with dry conditions and higher winds usually from the North or North East

Community expectations

1. The community expected noticeable improvement in managing dust over time
2. The company has invested considerable time and money to manage dust
3. What has changed?

Action

1. Full report for the community to be presented at the next KCCCC meeting
2. Community information sheet to be prepared

Extract from KCCCC meeting notes: 25th February 2016

4. Environmental emissions

4.1. Dust – Standing item

Garry Duncan, leader of the Dust Working Party, explained that he and other members of the KCCCC had received a number of dust complaints from the community in early January 2016. These had been followed up with personal visits to the mine site, conversations with the mine manager and other senior managers and by arranging a meeting and site visit for the Dust Working Party on 22nd January 2016.

Garry acknowledged that the company has invested considerable time, effort and resources into managing dust which added to the disappointment as the community had been expecting a noticeable improvement during this 'dust season'. One of the outcomes of the meeting was to ask Hillgrove to provide a full report on this matter at tonight's KCCCC meeting.

Lachlan Wallace, Kanmantoo Copper General Manager, provided a report on mining operations activity over the summer months and challenges with dust management. He summarised the situation as:

1. The moisture content in the soil was at very low levels due to the unusual climatic conditions associated with El Nino. This placed an increased significance on the availability of low grade water for use as a dust suppressant
2. The availability of waste water supply from the Mt Barker District Council (DC) had reduced from

**Kanmantoo Callington Community Consultative Committee (KCCCC)
Dust Working Party Site Visit Report (22nd January 2016) and KCCCC presentation (25th February 2016)**

the middle of 2015. Low water levels in Brown's Dam (Mt Barker DC's water storage facility) had also resulted in increased turbidity in this water source which slowed water treatment rates at Mt Barker DC's Recycled Water Treatment Plant and consequently limited supply to the mine. In response, the mine had provided the Mt Barker DC with a floating submersible pump to draw less turbid water from the top of the dam rather than lower down, increasing the treatment rates and improving flow from 15L/s to 30L/s

3. Other sources of lower grade water available on the mine site for dust suppression such as recycled water were also at low levels leading to a general lack of lower grade water for dust suppression. In response the mine had negotiated with SA Water for a supply of non-treated water. A pipeline was commenced in the second half of 2015 with funding support from the State Government. The pipeline was due to be commissioned late in 2015. The pipeline construction was delayed and eventually commissioning on Monday 25th January 2016.
4. Other responses aimed at dust suppression included:
 - spraying polymer over roadsides and stockpiles (total of 11 ha had been sprayed) to bind dust particles, making them heavier and less prone to becoming airborne
 - accelerating 'close out' (finishing) of rehabilitation programs aimed at stabilising landforms and thereby reducing the exposed ground which could generate dust
 - reviewing the dust Trigger and Active Response Plan (TARP) to use real time dust data to be more proactive when modifying or stopping operations. This means that the mine no longer waits for the dust level to exceed for an hour prior to reacting.
 - shutting down mining operations 31 times over the summer period (17 days in December 2015 and a further 14 days in January 2016)

Lachlan said that following the commissioning of the new pipeline there was now adequate lower grade water available on the site to meet the mine's requirements for dust suppression. He showed graphs which illustrated that the improvement has been immediate and measurable.

Action: The Dust Working Party was invited back to the mine site to observe the improved water reserves and the results of the use of this water in the dust suppression programs.

Alistair, the mining Regulator (DSD), presented a report that had been prepared in response to dust complaints from the community during the same period. In summary he said:

1. DSD had recognised ongoing community concerns about dust and this had triggered further compliance and complaint investigations in conjunction with the EPA
2. During calendar year 2015 there had been 11 mine related exceedances in relation to dust. These were concentrated in the latter part of the year consistent with the matters raised by Lachlan
3. The investigation had confirmed the mine's responses including:
 - the mine shut down 17 days during December 2015 and 14 days during January 2016
 - a review of the dust TARP was completed to enable a full range of options including shut down at the first response point to rising dust levels
 - the completion of an upgrade to the lower grade water supply for dust suppression including the supply of a submersible pump to Mt Barker DC and the commissioning of a new pipeline for supply from SA Water

Alistair agreed that these initiatives should make a significant difference in meeting the community's expectations over dust management.