

KCCG Topic Briefing

The following information has been collated by Kingaroy Concerned Citizens Group. Its purpose is to summarise the issues associated with the proposed Kingaroy coal mine. The information has been sourced from KCCG members and internet research.

Dust

General Information:

- Dust is measured by size and composition
- 10 micro PM is visible and what you are most likely to see.
- 2.5 PM is much finer, is scarcely visible, and can pose a health risk also.
- The health effects of coal dust are well documented and serious depending on exposure and length of time of exposure.
- One research paper from Sydney University is available at:
https://sydney.edu.au/medicine/research/units/boden/PDF_Mining_Report_FINAL_October_2012.pdf
- According to BOM data, for 9% of the time in Kingaroy, it is calm (no wind). During this time, dust falls in all directions from the mine
- Also from the BOM data, for 67 % of the time, the wind in Kingaroy is from the SW to East sector. (see diagram below).
- In summary, for the majority of the time (about 75-80%), someone in the residential areas of Kingaroy (including Taabinga Village, Golf Links Estate, and Lankowskis Rd) is likely to be affected by mine dust.

Creation of Mine Dust

The vast majority of dust is generated by general mine operations such as:

- Blasting
- In pit digging and loading onto truck
- Movement of trucks and equipment producing dust
- Dumping as overburden or into coal pile or plant
- Re-digging and loading overburden
- Re-dumping overburden
- Handling for transport to market.
- Dust picked up by wind from coal and overburden piles

A smaller fraction of the dust is from the handling of coal in plant for washing and separation

- Dry separation plant methods can only influence this smaller fraction of all mine dust.

Location in relation to mine is important.

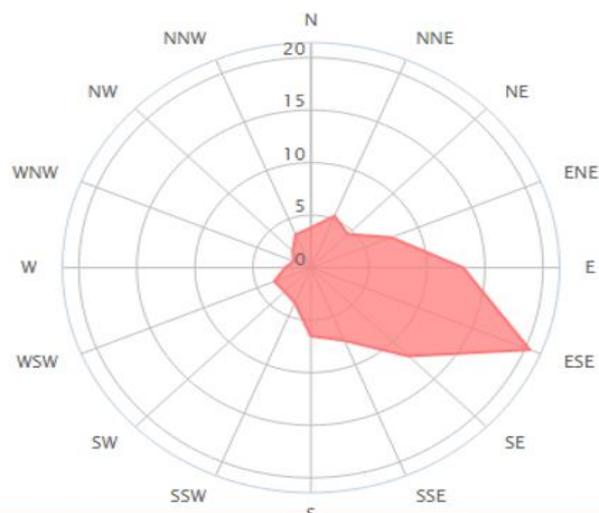
The proposed mine is close to residential areas and in a location that indicates a high level of dust to town frequency. The map below shows the first stage of the mine in relation to the residential areas of Kingaroy, Lankowski's Rd and the Golf Links Estate.



Wind Frequency Direction

The map below shows the BOM wind map for Kingaroy. It shows frequent winds from the directions of South West, South, South East and East. The further the shaded area from the centre, the more wind comes from that direction i.e. 20% of the time from ESE.

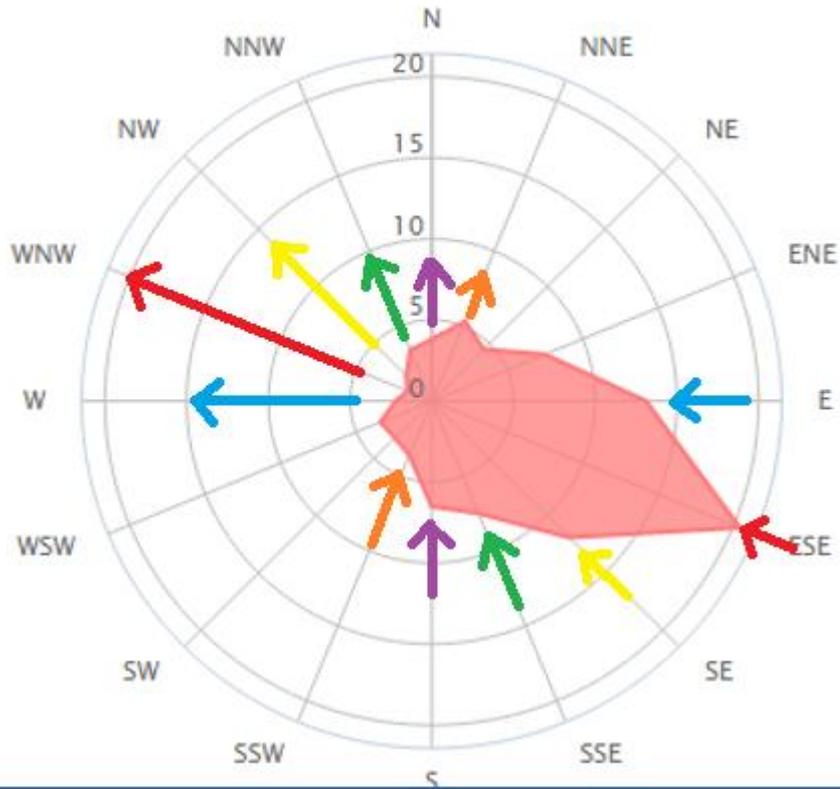
Wind direction distribution in (%)
Year



Probable Area Most Affected

It could be reasonably assumed that mine dust will be dispersed into these residential areas very frequently and in concerning concentrations.

Wind direction distribution in (%) Year



Conclusion:

The probability of Kingaroy residential areas being affected by dust from the proposed mine is high. Research on the health effects of mine dust suggests that due to such exposure, a higher than normal number of people in Kingaroy may suffer symptoms compared to the current conditions (no mine).

These health effects are available at:

https://sydney.edu.au/medicine/research/units/boden/PDF_Mining_Report_FINAL_October_2012.pdf