

Fairbreeze dust control measures

The monitoring and management of dust at Fairbreeze will be a continuous process as Exxaro appreciates residents' concerns. However, after 10 years of mining at Hillendale, Exxaro believes it has more effective dust control measures than when it started mining. The lessons that Exxaro KZN Sands has learned at the Hillendale mine will be implemented at the proposed Fairbreeze mine.

As part of the Fairbreeze environmental assessment process, dust fallout modelling was conducted to estimate the dust impact on sensitive reception, including the Mtunzini town, and to specify mitigation measures. This was a cumulative assessment which included all the ore bodies and related activities which could potentially contribute to the total dust impacts of the mine.

The air quality study that was part of the basic assessment report (BAR) found that implementing the proposed mitigation measures will effectively manage the dust levels. The specialist study also indicates that the dust at Hillendale and Fairbreeze does not cause respiratory diseases. Since the start of the Hillendale mine, there have been no dust-related diseases reported by workers.

The main source of dust are roads. This will be managed by wetting unpaved roads, and/or spraying them with dust suppressants. Exxaro will also control and minimise traffic on unpaved roads.

Other dust control measures include:

- Planting mined areas with intermediate crops directly after mining. Intermediate crops help to restore the structure, organic matter and nitrogen of the soil as part of the rehabilitation process. This will therefore reduce the footprint susceptible to wind-blown sand (dust).
- Covering open areas with vegetation.
- Building wind breaks. Exxaro will use shade netting to manage dust from the backfilled areas in the time before rehabilitation material is deposited.

A total of 19 dust fallout monitoring buckets and two bi-directional stations have been placed on and around the proposed Fairbreeze mine area. Dust levels will be monitored for the life of the project as per the requirements and recommendations of the specialist studies. Results from before mining will be compared with results during mining to determine absolute impacts, evaluate mitigation measures, and implement further actions if required.