Ambient dust monitoring campaign, Pinjarra

Summary report

Pinjarra community members expressed their concerns about potential dust emissions from the nearby Alcoa Pinjarra Refinery operations. Consequently, the department carried out a monitoring campaign to assess ambient dust levels for different times of year.

An air quality monitoring station was operated at a community receptor location on the northeastern outskirts of the Pinjarra township, over three periods in 2023 and 2024 for about five months.

The focus of the monitoring was on likely worst-case conditions during summer with higher temperatures and frequent easterly winds.

Although there were some issues with the monitoring equipment, the majority of data are considered valid and were analysed by the department.

The campaign found that the levels of airborne particles measured were generally low and below relevant national guidelines. There were, however, two smoke events from nearby fires that caused a higher level of fine particles. The concentration of 32 different metals in airborne particles was also measured and found to be lower than health guidelines.

The Department of Health reviewed the results and advised that the measured concentrations of dust and metals do not represent a public health risk at the relevant location where the monitoring was conducted.

Next steps

The Pinjarra community continues to have concerns regarding the level of dust in their community, and the department is aware that the location for the 2023–24 dust monitoring campaign did not consider potential dust levels across the broader Pinjarra community.

Because of these remaining concerns, the department intends to conduct another monitoring campaign at a more central location in Pinjarra over the summer, to better assess the levels of dust during these important times of the year.

The department will liaise with the Shire of Murray and the Department of Health in the scoping phases of this monitoring and will stream dust results in real-time on the department's website.

These live results will assist the Pinjarra community, especially sensitive groups, to see and respond to dust levels.