

AIR QUALITY

The Smelter and Refinery Expansion (SRE) Project is a proposed expansion of Olympic Dam's existing smelter and refinery facilities. If approved, the project would increase copper production capacity and support Copper SA's growth plans of creating a globally significant mine-to-metal copper province.

Copper SA is preparing an Environmental Impact Statement (EIS) to assess the project's potential environmental, social and economic impacts and identify how these impacts can be avoided, reduced or managed. The EIS is being prepared in accordance with South Australian Government assessment requirements and will be subject to public review and feedback.

Protecting air quality is a key consideration in the planning and assessment of the SRE Project. The EIS includes detailed assessments of air quality, greenhouse gas emissions, radiation, noise and vibration to understand how the project may affect the surrounding environment and nearby communities.

The SRE Project will increase smelting and refining capacity at Olympic Dam, which has the potential to generate emissions such as sulphur dioxide (SO_2), nitrogen oxides (NO_2), dust and particulate matter.

Air quality modelling has been undertaken to assess potential impacts on communities, including Roxby Downs, Andamooka and Olympic Dam Village. The assessment considered emissions from both industrial processes and supporting activities such as traffic movements and material handling.

As part of the assessment, dust generation was also evaluated – due to dust creation produced during construction, vehicle movements and day-to-day operations. Existing dust management practices and additional project controls will be used to minimise potential impacts. Air quality modelling indicates the SRE Project will not exceed applicable air quality criteria.

The project has also undergone a radiological assessment, which examined potential exposure pathways for workers, nearby communities and the environment. Modelling found predicted public radiation doses would remain well below recognised regulatory limits.

Noise and vibration impacts were assessed for both construction and operational phases. Potential increases in traffic-related noise were also considered, however, as the proposed project area is located a significant distance from local communities, modelling indicates impacts are expected to remain within applicable standards.