

Assessing noise impacts – Alkimos seawater desalination plant investigations



Like all facilities, the proposed seawater desalination plant in Alkimos must comply with noise regulations that limit the amount of noise produced and the resulting effect on nearby homes and businesses. We must also design a plant that is safe for our employees and contractors.

To reduce noise from the plant we have and/or will:

- Design the plant so that louder parts are located away from the boundary and positioned to deflect noise.
- Include noise attenuation measures within the building design that house noisier parts of the plant such as additional cladding and acoustic louvres.
- Select (where possible) quieter pumps and other noise producing parts and equipment
- Lower the plant into the proposed site environment to take advantage of the noise attenuation offered by the surrounding dune environment.
- Make some improvements to the dunes, including the formation of a new berm on the western boundary.

Modelling noise output

To understand the possible noise impacts on the Alkimos community we completed a noise study. The study considered our current and future water assets planned for the Alkimos Water Precinct (where the seawater desalination plant would be built) and the maximum noise that may be generated by their operation. To anticipate noise produced by these assets we used data collected from our existing plants and assessed it with ambient noise levels collected from the local area (such as traffic from nearby roads). Local weather conditions, including wind strength and direction, were also considered.

How much noise will the site produce?

Our noise study determined that our planned noise containment and management efforts are sufficient to reduce noise impacts from the operating site on the nearby community to within acceptable levels (as detailed in the Environmental Protection (Noise) Regulations 1997). By comparison, current noise from the nearby Marmion Avenue was recorded at higher levels than is expected to be produced by the Water Precinct once all noise control measures are in place. During construction, there may be periods of increased noise. We will work with the community during these periods and where possible schedule works to reduce inconvenience.

Will I be able to see the plant?

By sinking the plant and making some improvements to the dunes we are able to hide the plant from public view. This not only makes the site look better but also helps to reduce noise levels. Access to the plant for employees and contractors will remain from the dedicated road off Marmion Avenue, further mitigating impact on nearby homes and businesses.

Stay informed

We will continue to keep the community and stakeholders updated as we progress our planning. Visit watercorporation.com.au/securingwater to read more about our long term plans for Perth's water supply.