



# Managing odour, noise and biosolids



## Managing outputs from the treatment process

As well as recycled (non-drinking) water, Googong's Water Recycling Plant will need to ensure it meets environmental and public health requirements for odour, noise and biosolids.

### ODOUR MANAGEMENT

Due to the close proximity of the Water Recycling Plant to residential areas, the management of odour is integral to the operation of the plant. The following measures have been put in place to manage odour:

- Centralised odour extraction and treatment facility.
- Odour is treated with biological trickling filter and carbon filter. Biological trickling filter removes odour from the air, while carbon filter is the final polishing process.
- Treated air is released via an exhaust stack.
- Other areas that may emit odour (inlet works, sludge facilities and bioreactors) are covered.



Bioreactor and odour pipework

### NOISE

Noise is a product of most industrial equipment and treatment plants. To minimise disturbances, the following measures have been included at the Water Recycling Plant:

- Installing louvres in the blower room and using thick concrete for the blower room walls.
- Treating ceiling and side access doors, to provide a positive seal for the buildings housing noisy equipment.
- Enclosing machinery in buildings, where possible.
- Installing silencers for exhaust stacks or vents servicing noisy equipment.



Noisy equipment is housed in buildings

### BIOSOLID TREATMENT AND REUSE

Biosolids are an organic by-product produced from treating waste water and are further processed to produce a reusable product.

- Googong's Water Recycling Plant will produce Grade B biosolids – the second highest classification.
- Grade B biosolids can be used for agriculture, forestry, soil and site rehabilitation, landfill disposal and surface land disposal.



Biosolids treatment area