

### Case Study: VapourGard at Lucas Heights Resource Recovery Park



Located in Lucas Heights, Sydney, NSW, the Lucas Heights Resource Recovery Park is one of Australia's largest operating waste processing facilities, with its Renewable Energy Smart Cell® technology and additional ORRF organics facility processing over 625,000 tonnes of waste per year.

#### The Challenge

As the facility expanded and increased capacity the surrounding suburbs also became larger and the facility has begun to encroach on densely populated residential and industrial zones. By the year 2018 complaints had become a regular occurrence, and regulatory authorities had issued the site with notices requiring them to take action and reduce the amount of diffuse odours that were being released by the facility.

#### The Solution

Quite rapidly the situation escalated and the facility operators engaged CleanaWater's Odour Control Department to assist in coming up with a solution to ensure the facility could continue to operate while mitigating complaints from surrounding residents and businesses.

Initial enquiries from landfill management were for traditional misting systems that atomise diluted odour neutralisers into the air, although these systems can sometimes still be useful, due to the size of the operation and the importance of Select Civil, who manage the SUEZ owned facility, getting a comprehensive solution, CleanaWater recommended the facility managers take a different approach. That approach is a new technology rapidly gaining popularity in the US and Europe using vapour based neutralisers rather than atomised water-based solutions.

#### What CleanaWater Did

In the summer of 2018, CleanaWater installed two VapourGard™ VG 500 systems around the boundary of the active waste cells, using our QuikAir® V vapourising odour neutralising solution. Combined, the 2 systems provided the Lucas Heights facility with 1 kilometre of diffuser pipe to install between the active waste cells and the complaining constituents, which constantly releases vapourised QuikAir® V into the atmosphere.

#### Applicable Industries

- Mining
- Meat & Livestock
- Manufacturing
- Solid Waste Management
- Food & Dairy Processing
- Landfill
- Composting

### The Outcome

Since installation, complaints all but ceased, and reports from operations have confirmed that odours are now minimal, noticing a substantial improvement in the air quality, even within the site premises.

The results were;

- Expert management of odour emissions
- Elimination of business and resident complaints
- Environmental regulation compliance
- Increased community approval

### Why use VapourGard™

The theory behind these systems is simple: if you want to catch or treat an airborne odour, you have to use a vapour. Water-based particles are simply too heavy to stay in the air long enough and the systems that release these solutions are maintenance heavy and at times unreliable. VapourGard™ solves these issues as the vapour produced with our specialised QuikAir® V solutions, disperse at the same consistency as the surrounding air, giving the active ingredients more time and opportunity to break down the odorous air and turn them into non-volatile and non-odorous compounds.

In addition, this also led to regulatory authorities being satisfied that Select Civil had taken a very proactive and effective approach to solve their issue and operations have continued uninterrupted for the past 4 years.

CleanaWater remains committed to maintaining a cooperative relationship with Select Civil, ensuring the systems installed have all compensatory and chemical to be operational 24/7, 365 days a week. CleanaWater is also very proud of our continued involvement in the SUEZ owned Select Civil managed operation of which produces enough renewable energy to power over 47,000 homes a year.

*"We have seen a fantastic improvement since the VapourGard™ system was installed. The system mitigates the heavy odours which are released from the site, which has improved conditions for our staff and almost completely eliminated complaints from local residents and businesses."*

**Glenn Claverie - Site Manager, Select Civil, Lucas Heights Resource Recovery Park**

