

# Odor Control Solutions for Australia's Largest Brewery Operation

Founded in 1869 by brothers John and James, Tooheys is one of the oldest brands of beer brewed in Australia. Today, part of the Lion Company—a global food and beverage company—Tooheys is one of several beer brands produced in eight plants in Australia, including a facility in Lidcombe, New South Wales, about 13 miles from downtown Sydney.

The brewery site, although located in an industrial complex, is adjacent to several nearby homes and retail establishments. First built in 1955, the plant has been consistently modernized to improve manufacturing and packaging efficiency and to better utilize water and energy resources. The fermentation process used to produce beer requires a great deal of water and results in wastewater, which needs to be treated onsite and is often a potential source for odors and air emissions.

To effectively handle odors and air emissions from the facility, Lion began working with Aquatec Maxcon, BioAir's Solution's regional partner and a provider of water and wastewater technology and equipment in Australia. Because of Lion's commitment and obligations to protecting the environment, Aquatec helped to specify a "green" odor control solution that didn't use hazardous chemicals.

As part of the installation to handle potential odors at the facility, Aquatec specified two different types of BioAir's innovative technology. A larger EcoPure® unit—which combines a biotrickling filter and an adsorption polishing stage in a single vessel—was installed in the brewery's wastewater pre-aeration basin to handle airflow of 2,500 cubic meters per hour (1471 cfm). A second smaller EcoPure unit was specified for the anaerobic reactor headspace to effectively handle airflow of 200 cubic meters per hour (118 cfm). Two additional EcoCarb units—which feature an adsorption media—were installed to handle air emissions from the buffer tank and dewatering building of the brewery's wastewater treatment plant.

According to Louis le Roux, the president of BioAir Solutions, the EcoPure units have defined a new generation of odor control for reliable, long-term removal of both organic and inorganic odors in municipal and industrial wastewater treatment applications.

"Our EcoPure technology utilizes BioAir's breakthrough patented EcoBase® structured synthetic media with engineered flow channels, providing state-of-the-art performance with superior process control of critical parameters such as moisture content, pH and nutrient

supply," said le Roux. "EcoPure then adds a secondary polishing step, which can be important for highly sensitive locations," added le Roux.



Once installed in the Tooheys brewery in August of 2014, le Roux said the EcoPure and EcoCarb technologies immediately began removing more than 99.9 percent of hydrogen sulfide (H<sub>2</sub>S) odors and the majority of organic odors from the airstreams of the wastewater facilities without using any chemicals.

BioAir Solutions' engineers and scientists develop new science-based technologies and solutions to make biological odor and air emissions control for municipal and industrial wastewater treatment facilities. For more information, visit [www.bioairsolutions.com](http://www.bioairsolutions.com).



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