



OxyGEM Trial

OxyGEM was the first of two potential solutions identified by independent air emissions consultants in New Zealand.

The system – known as the OxyGEM system – was first developed for controlling odours coming from papermaking operations, but has since been used in New Zealand and Australia to control a wide range of odours, ranging from rubbish disposal sites to piggeries.

The system involves spraying a harmless, oxygen-based chemical into steam released by the plant which neutralises the odour, rather than masking it. When released, the chemical reacts with the atmosphere to form organic salts rather than vapour. It is heavier than air and drops straight to the ground as a harmless organic salt. It does not smell and cannot revert back into its previous form or build-up.

The OxyGEM system was introduced at BGC Fibre Cement in July as a possible way to reduce odour created during the production of fibre cement. Installed at a cost of approximately \$20,000 it was trialled between September and November in 2002. BGC Fibre Cement and the Parkwood Air Quality Monitoring Group worked together in this period to determine the level of success of this method of odour control.

When the system was evaluated by the group in March 2003, it was agreed that while OxyGEM worked well in and around the plant, there were less satisfactory results in the community as local residents were still experiencing problems.