

Air Treatment Facilities

Date

Completed March 2011

Location

Box Hill South, Albert Park & Port Melbourne

Project Value

\$1.47 million

Project Details

The Client had received numerous complaints regarding odour from sewer vent stacks, one of which was investigated by the State Ombudsman. In response, the Client decided to trial a localised odour treatment facility in Box Hill South on the Gardiners Creek Sewer Main. This was a success and further treatment facilities have been constructed in Port Melbourne, Albert Park and are proposed for other locations around Melbourne Waters Sewer Network.

The scope of work included: investigation and selection of a mechanical odour treatment system for ventilation compatible with the Client's sewer transfer network; full installation; power, water and phone line connections; Real time monitoring of operational status; Upstream and downstream online H₂S monitoring; Provision of upstream and downstream portable H₂S monitoring; And, connection to Melbourne Waters SCADA Network.

Quality & Functionality

The technology of odour treatment is not a new, however localised treatment within the Melbourne Water Sewer Network is innovative and the site in Box Hill South represents the first of its kind.

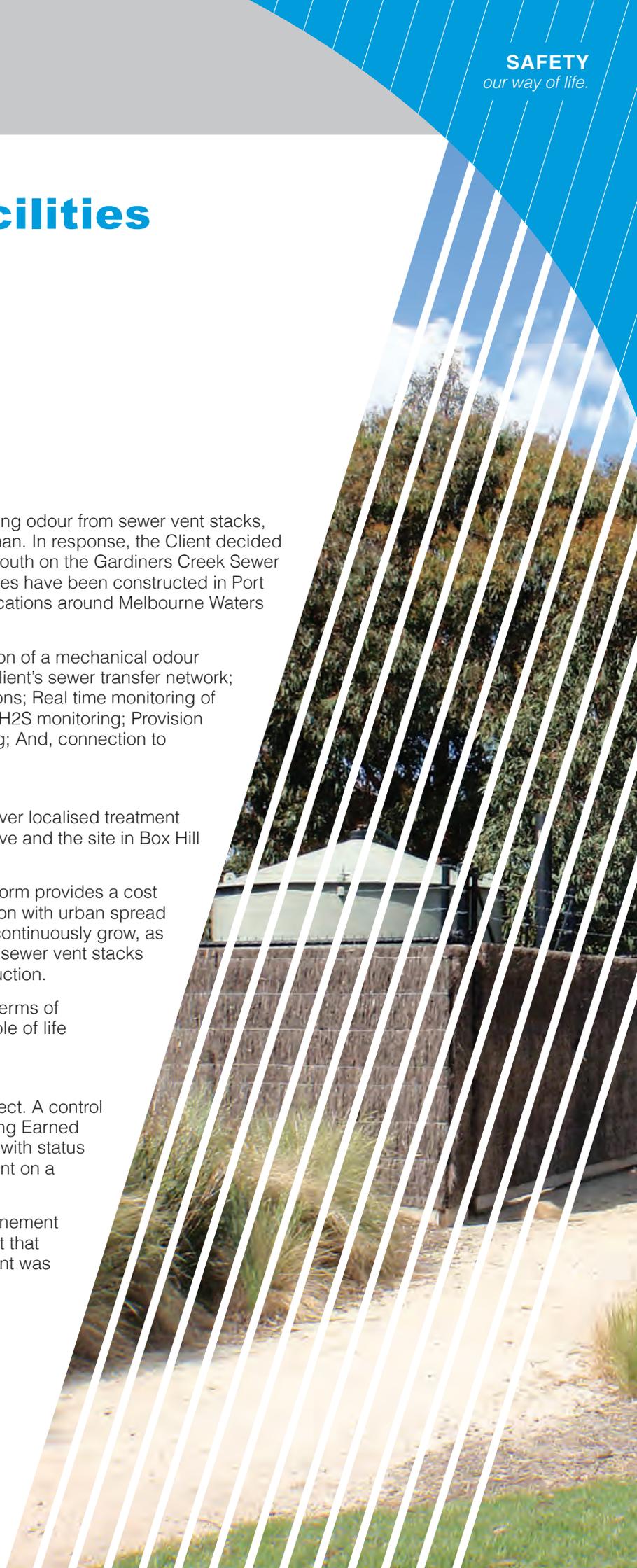
Installation of the bio-filtration odour treatment in this form provides a cost effective solution to a problem becoming more common with urban spread and density growth. As building heights and density continuously grow, as to does the need for odour treatment solutions due to sewer vent stacks being outside peoples windows following new construction.

The units have outperformed Clients expectation in terms of odour management, environmental footprint and whole of life maintenance costs.

Schedule and Project Planning

Microsoft Project was used for each phase of the project. A control baseline was set; the phases were then managed using Earned Value Methodology. Scheduling was updated weekly, with status and progress against the baseline reported to the client on a monthly basis.

The project was delivered under budget, however refinement of real time data on the SCADA system network meant that handover was slightly delayed. Nevertheless, the Client was extremely please with the final outcome.



Stakeholder Management

Positive relationships were developed with the adjacent Golf Club, Council and Residents. No complaints were received during the construction and the Client's stakeholder satisfaction survey scored a stakeholder satisfaction result of 100%.

Environmental Management

Odour at the site was eliminated to the satisfaction of the local community. The site was aesthetically improved with strategic low key landscaping to blend the Air Treatment Facility into its environment.

Major Lessons Learned

The Teams investigation of the units, the treatment process, treatable areas and the footprint required has streamlined analysis into odour treatment unit choices, and suitable unit locations for its client.

We passed this expertise forward, and in turn have eliminated a considerable amount of design and investigation work necessary into appropriateness of proposals, and have provided efficiencies as investigations have already been done to unit suitability. This data and expertise is being used on an ongoing basis to assist the client with odour management policies.

Client References

Client Representative for Melbourne Water – Robert Fisher



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