

Environmental Improvements

RTA Yarwun



Environmental Improvements 2002

- Commencement of engagement with Yarwun community during construction of refinery.
- Each quarter residents participate in a discussion regarding the refinery's environmental performance.



Environmental Improvements 2005

- Reduction of energy intensity from 16.2 to 9.5 gigajoules per tonne of alumina produced.
70% performance improvement.
- Reduction of greenhouse gas intensity from 1.31 to 0.81 tonnes of carbon dioxide equivalent per tonne of alumina produced, representing a 38% performance improvement.



Environmental Improvements 2005

- Community consultation was included as a key component of the Sustainable Development reporting conducted by the refinery. Key stakeholders, community members and employees are consulted prior to, during and after the report.



Environmental Improvements 2006

- Reduction of energy intensity from 9.5 to 9.0 gigajoules per tonne of alumina produced, representing a 6.0% performance improvement.
- Reduction of greenhouse gas intensity from 0.81 to 0.79 tonnes of carbon dioxide equivalent per tonne of alumina produced, representing a 2.9% performance improvement.



Environmental Improvements 2006/07

- \$35,000 investigation of performance on emissions of nitrogen oxides revealed a potential 25% improvement through Calciner Modifications.
- Several projects to improve the refinery's neutralisation and effluent management system were undertaken. Including upgrade to pumps, improved seawater flow control and installation of continuous dredging equipment.



Environmental Improvements 2007

- Commenced participation in the Clean and Healthy Air for Gladstone study to address community concerns about air quality.
- The refinery's risk register with more than 3,000 entries was completely updated. The register is used by leaders when planning operating and capital expenditure budgets and covers Health, Safety and Environmental risks.



Environmental Improvements 2007

- A major project to measure the actual composition of stack emissions was completed in 2007.
- A review of groundwater monitoring procedures was completed. RTAY also purchased a Geographic Information System (GIS) to manage this data set. The review found that refinery operations have not impacted local groundwater.



Environmental Improvements 2007

- The refinery obtained re-certification for its Environmental Management System in September 2007.



Environmental Improvements 2008

- Capital improvement programmes targeting reduction and containment of liquid and air emissions. (Please give detail.)
- A ten-fold increase in the amount of waste material recycled, predominately timber and gloves.



Looking forward

- Remote automatic sampling devices will be installed at the residue management area.

