

Working for Cleaner Air

The issue of air quality monitoring is one of the most important faced by the Kwinana Industries Council (KIC) and is one of the factors that led to the Council's formation.

Development of industry in Kwinana combined with growing industry and community awareness resulted in regional air quality becoming an issue of community interest from the 1980s onwards.

As the regional population increased in the area, a Kwinana air quality buffer zone was created and formalised by the 1992 Kwinana Environmental Protection Policy. The buffer assists industry and the State Government to manage industrial emissions so as to maintain a healthy level of air quality for employees and surrounding communities.

With the number of people living in the region continuing to grow, it has become even more important that air quality is of the highest standard and for the buffer zone between industry and residential occupation to be preserved.

In addition to industrial sources of air emissions, there are larger sources of air contaminants from non-industrial emissions such as motor vehicles and domestic wood fires. It is therefore important that Government, industry and the community work together to continue monitoring air quality in WA to better understand sources and their contents.

The quality of Kwinana's air has improved considerably over the years and industry has a continuing commitment to lessen its environmental impact.

It is KIC members' policy that air quality monitoring should be of the highest standard possible and that the community should be consulted when monitoring programs are being designed.



Industries in the Kwinana Industrial Area have a consistent track record of being below regulatory limits on air emissions. The KIC provides open access to data for Sulphur Dioxide readings on its website where several years' worth of data is available (kic.org.au/air_quality.asp)

Monitoring Air Quality

The Federal Government lists substances of concern in what is known as the National Pollutant Inventory (NPI).

In the Kwinana Industrial Area between 2002 and 2006, more NPI-listed substances showed an overall trend of decreasing (or stable) annual emissions to air, than those that increased.

A review of ambient air quality within the Kwinana air-shed found that "none of the substances monitored are likely to result in significant impacts on either the community or industry at the current time".¹

Generally emissions are not presently considered to be having an unacceptable impact on ambient air quality.

Furthermore, for each particular substance, only one or two facilities contributed to the trend of increased emissions of these products of combustion. Reasons for this are given in the full report, but are primarily related to a regional unavailability of natural gas as a fuel source and the necessity, therefore, to burn more coal for power generation.

When these "unavoidable" incidences of coal burning facilities are excluded from analyses, the net emissions from all other facilities exhibit either a stable or decreasing trend of Sulphur Dioxide emissions between 2002 and 2006.

In regards to greenhouse gas emissions for the nine full-member KIC facilities for which information was available over the period 2003 to 2005, annual net greenhouse gas emissions were generally stable despite an increase in production.



This graph shows the official month-by-month monitoring results. The red line at the top of the chart is the regulatory limit, based on health care standards.

The grey line halfway down is the goal industry set itself when monitoring began.

The actual monitoring results, across the bottom of the chart, show that industry emissions of Sulphur Dioxide are averaging at around 7% of the regulatory level and have been for some time.

Case Study

Kwinana Power Station can use either natural gas, coal or distillate to fuel its power generating plant.

When fuelled by coal, the power station's emissions of sulphur dioxide and hydrochloric acid are higher than when fuelled by natural gas or distillate.

Increases in emissions from the Kwinana Power Station results from the supply limitation of gas. Coal therefore must be burnt to supply power in peak load periods.

As Verve Energy is supplier of last resort it has an obligation to supply electricity (to both domestic and industrial markets), often with no choice as to the fuel it uses when forced to increase production during times of high demand.

1. Review of the Department of Environment's Background Ambient Air Quality Study Preliminary Results and the Implications to Community/Industry. Environ Australia July 2006. Available at kic.org.au/reports.asp