

Summary of Key Points

- Residents living in the City of Cockburn (particularly, Beeliar, Yangebup and Munster) are angry and frustrated that they are still being exposed to toxic gas and particulate emissions from the Premises
- For 20 years DWER’s predecessors have failed in their statutory duties under the *Environmental Protection Act 1986* to take effective action to abate airborne toxins from the Premises
- There is irrefutable evidence that burning coal produces airborne toxins and causes serious illness in humans, especially children and other vulnerable cohorts
- The Licensee generally uses a mixture of 90% coal/natural gas 10% as fuel for its lime kilns at the Premises
- If the Licensee is required under its licence to use only natural gas there will be significant reductions in toxic gas and particulate emissions from the Premises, especially a substantial reduction in odourous sulphur dioxide emissions
- A comparison between using gas instead of coal prepared by the Energy Information Administration in the USA shows how using natural gas substantially reduces the levels of toxins produced by coal burning:

Fossil Fuel Emission Levels			
– Pounds per Billion Btu of Energy Input			
Pollutant	Natural Gas	Oil	Coal
Carbon Dioxide	117,000	164,000	208,000
Carbon Monoxide	40	33	208
Nitrogen Oxides	92	448	457
Sulfur Dioxide	1	1,122	2,591
Particulates	7	84	2,744

- There are additional measures available to the Licensee to further abate toxic gas emissions from the Premises but it will not act unless government mandates them
- Sulphur and chlorine inputs into the kilns which produce toxic gases can be further reduced if the Licensee is required to filter out these elements and their compounds from groundwater it uses
- Salt (in shell sand) entering the kilns produces toxic gases and these gases can be further abated if the Licensee is required to thoroughly wash the raw material in filtered groundwater to reduce the quantity of salt entering the kilns
- Production of toxic fluoride compounds can be reduced by using gas instead of coal and removing seawater from shell sand before it enters the kilns
- The quantity of carbon monoxide, oxides of nitrogen and volatile organic compounds can be substantially reduced by the installation of available technology, such as a DeCONOX plant
- The introduction of a real-time online gas and particulate monitoring system in the community, available to the public 24/7, will allow residents, teachers and other carers to self monitor exposure to these toxins and to take preventative action to protect themselves and those for whom they are responsible
- Cockburn residents will continue their campaign for government to protect the health of their children from airborne toxins emitted from the Premises until effective action is taken