

LATEST NEWS

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Gas vs Coal

Everyone knows that burning coal creates air pollution.

Some years ago Cockburn Cement Limited (CCL) was required to stop using coal for its lime/cement kilns to reduce its toxic gas and particulate emissions and it began using natural gas. When the Varanus gas plant had an accident and could not supply gas for a time, CCL started using coal again. Coal is cheap and dirty and gas is more expensive but much cleaner.

Just how dirty is CCL's lime manufacturing business at Munster using coal as its fuel?

The following figures are taken from the National Pollution Inventory maintained by the Federal Department of the Environment and Energy for the year ending 30 June 2016:

Carbon monoxide (**1,000,000 kg**), Oxides of nitrogen (**900,000 kg**), Sulphur dioxide (**160,000 kg**), Particulate matter 10.0 um (**66,000 kg**), Particulate matter 2.5 um (**4,500 kg**), Hydrochloric acid (**23,000 kg**), Volatile Organic Compounds (**15,000 kg**), Chlorine & compounds (**4,400 kg**) as well as a range of other toxic substances, including arsenic, cadmium, chromium, cobalt, copper, fluoride compounds, lead, manganese, mercury, nickel, polycyclic aromatic hydrocarbons and zinc (and compounds).

Link: <http://www.npi.gov.au/npidata/action/load/emission-by-individual-facility-result/criteria/state/null/year/2016/jurisdiction-facility/WA0247>

Everyone living around the Munster factory is exposed to a mixture of some of these toxins.

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
Mercury	0.000	0.007	0.016

So simply changing from coal to gas will substantially reduce the pollution emitted by CCL's factory.

However, a second change is also required because CCL uses large quantities of groundwater in manufacturing its lime products and the groundwater contains sulphur which also contributes to the level of sulphur dioxide emissions. CCL must either stop using groundwater or treat the groundwater to remove the sulphur.

These two simple changes will substantially reduce air pollution in Cockburn.

The community needs government to direct the Department of Water and Environmental Regulation to mandate that CCL:

1. comply with National Air Quality Standards;
2. use gas instead of coal; and
3. remove sulphur from the groundwater it uses or obtain an alternative supply.