



FAQs – Alternative Fuel use

1. What is the main fuel used by the Adelaide Brighton Cement (ABC) plant at Birkenhead?

Natural gas is the main fuel used and it provides approximately 70% of the total fuel requirement.

2. What is 'alternative fuel' in the ABC context?

Any combustible material which is not a traditional fossil fuel such as coal, gas, diesel or petroleum coke. The fuels allowed are detailed in [schedule X1](#) of the licence.

3. What levels of alternative fuel are currently permitted?

The current approval levels in the site licence allow up to 15t/h of Recycled Construction and Demolition waste, and up to 2.5t/h of Carbon Powder (processed waste from the aluminium smelting industry). These are detailed on [schedule X1](#) of the licence. There is currently a process in place where ABC is seeking approval to increase the allowable limit of plastic in the demolition wood waste.

4. What are the benefits of using alternative fuel?

- Less reliance on natural gas.
- Reductions in nitrous oxide emissions.
- Reduction in the carbon dioxide footprint.
- Cost reductions which improves ABC's competitiveness against imported product.
- Diversion of waste from landfill, this is a beneficial re-use of resources which would otherwise be lost as landfill.
- The extremely high temperature and long residence time in the kiln process ensures that all components of the alternative fuel are completely destroyed.
- Any ash in the fuel is beneficially incorporated in the kiln product, which reduces the requirement for mined raw materials.

5. What are the potential adverse effects of using alternative fuel?

- Alternative fuel is a lower energy value material so there are some operational challenges to ABC.
- Inputs of certain heavy metals increase with the use of alternative fuels. However, it has been shown by stack testing that these metals are captured and immobilised in the kiln product.

6. How does the EPA monitor the potential adverse impacts of using alternative fuels?

The EPA regulates ABC under the *Environment Protection Act 1993* and through the licence issued to ABC. This [licence](#) contains conditions relating to the use of alternative fuels and to monitoring of stack emissions.

Conditions relating to alternative fuel use include conditions 32–15 and 32–23 of the licence. Conditions relating to the monitoring of emissions include conditions 32–34 and 305–635. [Stack emission reports](#) are available on the EPA website.

7. Does the use of alternative fuel add to the level of noise coming from the plant?

All alternative fuel equipment are housed in buildings and fitted with noise abatement equipment/silencers. All noise sources on site contribute to overall noise levels. ABC is undertaking noise abatement programs as part of their [current EIP](#). The EPA is actively monitoring noise levels from the Birkenhead Plant to assess compliance.

8. Does the use of alternative fuel add to the level of any air pollutants coming from the plant?

Stack testing has shown that alternative fuel use does not add to the level of air pollutants. The level of nitrous oxides emissions is reduced with the use of alternative fuels. [Stack emission reports](#) are available on the EPA Web site.

9. Is it possible for asbestos to escape from the plant as a result of using alternative fuel?

There is a multi-barrier approach to preventing asbestos being received at the Birkenhead cement factory. These include measures to prevent asbestos from being received at the alternative fuel facility. The alternative fuel producer has inspection protocols to ensure deliveries do not contain asbestos. If, despite these measures, asbestos did find its way into the kiln process it would be completely destroyed, with its chemical components usefully consumed in the kiln product.

The use of alternative fuel does not pose any increased risk of asbestos.

10. If ABC were to apply to increase the permitted level of alternative fuel, what process is in place to allow prior consultation with residents and how will residents be informed of such a process?

[Schedule W](#) of the site licence specifies the process which must be followed if ABC wants to increase the permitted level of alternative fuel. Part of this process is to advise the local residents. Since Alternative Fuel usage commenced in 2003, this has been done through the [Adelaide Brighton Cement Community Liaison Group](#).

ABC are currently going through the process to be able to increase the maximum percentage of plastic in the demolition wood waste.