

## AFRW – historical information

ABC Birkenhead has supplemented its use of natural gas through the use of alternative fuel, including demolition wood waste. This demolition waste can sometimes contain small amounts of plastic and it is not economical to remove this prior to burning. Burning small amounts of plastic within the wood waste, at high temperatures, does not cause any adverse impacts on emissions. To ensure that the amount of plastic remains at levels where no impact would be detected, the EPA had previously placed a licence limit of no more than 10% plastic in the demolition wood waste used. This limit was based on the original applications and information provided which suggested this was the makeup of the material to be used.

The EPA required the production of a detailed pre-trial report, the completion of the approved trial methodology and submission of a post-trial report as per the EPA licence for ABC.

The EPA assessed and accepted the [Alternative fuel post-trial report, March 2015](#) and was satisfied that there are no adverse impacts from the increase in the plastic content based on the trial reports and modelling. The post-trial report also highlighted likely environmental benefits as a result of using alternative fuels to complement the primary fuel source of natural gas. The benefits include a reduction in both nitrogen oxide emissions and the overall carbon dioxide emission footprint of ABC's operation. All other analytes, including dioxins, were well below the levels specified in the *Environment Protection (Air Quality) Policy 2016*.

In late 2016, the EPA received an application from ABC to increase the allowable percentage of plastic (from 10% to 20%) in the alternative fuel it burns as a supplement to natural gas to fire its cement kilns. This alteration was requested due to changes in the materials received by the supplier and the way in which the fuel was being produced.

This change of process request from ABC triggered a licence relaxation process resulting in a public notification and consultation process. As part of the assessment of the proposal and the consultation process the EPA:

- sought public feedback
- issued public notifications in local media
- provided ABC with a summary of submissions raised through the public consultation process and an opportunity to respond
- provided updates on the EPA website outlining the information regarding the proposal and the EPA's proposed changes to licence conditions.

In July 2018 the EPA approved the process change and amended Licence 1126 to permit an increase of the allowable maximum plastic content (by weight) to 20%.

- The EPA's decision was based on: a thorough review and analysis of the submitted application provided by ABC which included the increased plastic content trial methodology, testing and results. This review and verification of information included advice from the EPA's Air Quality Scientists and a third-party review by the Victorian EPA
- confirmation of the use of independent National Association of Testing Authorities (NATA) accredited testing
- regard to the community submissions on the proposed changes received on this matter, including ABC's response to the summary of submissions.

The EPA placed additional controls to ensure compliance with environment protection policies and the maximum allowable plastic content of 20%. The licence aligns with the [Refuse Derived Fuel standard](#), which is referenced in the *Environment Protection (Waste to Resources) Policy 2010*. The term 'refused derived fuel' or RDF was applied to the licence to more accurately reflect what can be received and used as an alternative fuel. The EPA required ABC to develop a [recovered product plan](#), which was subsequently approved.

These controls ensure that quality assurance measures are in place and that appropriate material is received and used.

### **Application to amend the approved feed rate of RDF**

In August 2020, ABC applied to the EPA to vary its licence to amend the feed rate of RDF. At this time the licence specified (under Schedule X-1) that RDF could be used at an approved feed rate of 15 tonnes per hour (to a maximum of 20% plastic contamination by weight). ABC submitted an application to the EPA to increase its approved feed rate of RDF to 25 tonnes per hour (to a maximum of 20% plastic contamination by weight).

ABC's licence specifies the steps that must be taken for such a change to be approved. This includes submission of a pre-trial report to the EPA, conducting a trial (where approved and pursuant to the pre-trial specifications) and provision of a post-trial report for the EPA's consideration.

ABC met the pre-trial and post-trial requirements, and the EPA assessed and accepted the post-trial report. The EPA was satisfied that the RDF feed rate increase would not result in adverse impacts and would be managed in an environmentally acceptable manner and that ABC had consulted with its Community Liaison Group on this variation.

As such, the EPA assessed and approved ABC's application to amend the approved maximum feed rate specified in Schedule X-1 of Licence 1126 to 25 tonnes per hour (maximum of 20% plastic contamination by weight).