

Recycling starts with a bang

Fairport Engineering has been working with MBA Polymers UK for just over a year assisting in the development of a brand new £25 Million state of the art plastics processing plant in Nottinghamshire. MBA Polymers is a leader in recycling high-value plastics from complex waste streams and end-of-life durable goods such as appliances, computer and business equipment, automobiles, and even sporting equipment. The company's site in Worksop was formerly used for glass production and will provide the ideal location logistics-wise for housing the planned 80,000 tonnes per annum facility.

On 12 February Fairport commenced with the demolition of the now redundant glass batching and mixing plant in order to make way for the new plastic processing facility, with the final stage of the demolition and remediation works taking place on 8 March and included the old glass furnace and its associated 70m high concrete chimney.

The demolition was undertaken using shaped explosive charges and the rubble generated will be treated on site to make a recycled aggregate that can be used for construction purposes.

MBA Polymers UK is a joint venture company formed between MBA Polymers of Richmond, California and European Metal Recycling (EMR) of Warrington, Lancashire and will recover plastics from upgraded "shredder residue". This shredder residue is a complex plastics-rich mixture of materials resulting from the recycling of automobiles, appliances and other metal-rich streams. It is estimated that over 10 million tons of plastics from automobiles, electronics, appliances and other end-of-life durable goods are disposed of each year around the world. These plastics are commonly landfilled or incinerated at high economic and environmental costs because they have been deemed too complicated or expensive to recover.

David Ireland, EMR's director of technical services is quoted as saying:

"EMR is a leader in metals recycling and this collaboration with MBA will make us a leader in plastic recycling too. It is a very significant step not only for EMR and MBA but for the UK too as this investment will allow us to recover the previously untapped plastic resource in the materials we recycle. Not only will this divert materials from landfill and generate significant CO2 savings but it will also put EMR at the forefront in meeting the very demanding recycling targets set under producer responsibility regimes in vehicle and electronics recycling. These targets are very exacting and can only be met by applying new technologies to the recovery of plastics. We have been working with MBA for some time on this problem and we are very excited that we have now reached the stage where we can start to build a plant in the UK"

MBA and EMR also believe that this venture represents not only an important business for both companies; but it also provides large social and environmental benefits as well.

Michael Biddle, MBA's founder and president, provided some examples of the 'win-win' benefits that go beyond the obvious reduction in waste:

"Additional benefits are realised through the efficient production of plastics from plentiful domestic scrap and waste materials, which is particularly important in these times of high energy and commodity costs. Rather than build expensive and energy-consuming chemical plants, our company provides a way to manufacture plastics at a significantly lower economic and environmental costs. Our plants require much less energy compared to a traditional petrochemical-based plastics plant to make the same amount and types of



MBA's Worksop plant before demolition



MBA's after the explosive charge

plastics. And for every ton of virgin plastic we replace, we can save two to three tons of the greenhouse gas CO2 from entering the atmosphere".

Fairport Engineering was appointed as MBA Polymers' EPCM contractor in January 2008 and has been providing services to facilitate plant design & build, site selection and achievement of regulatory permissions since then. The recent closing of the design & build contract now allows Fairport the opportunity to "fast-track" the plant completion in the early part of 2010.

Paul Fitton, Fairport's MD, comments: *"I am obviously delighted to be awarded an assignment of this nature under current trading conditions. I truly believe that our proven long-standing expertise in bulk materials processing and handling projects makes us an ideal partner for MBA and EMR on this project."*

Paul added: *"Having brought on-line our own MSW processing facility at Huyton, Liverpool early last year this new project confirms our sustained involvement and capability in the high technology end of the rapidly expanding recycling and energy from waste sector."*

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