



CHESTERFIELD & DISTRICT LOCAL HISTORY SOCIETY HISTORY BITES

Chesterfield and District Local History Society's 'History Bites' are an occasional series of website published articles about Chesterfield and district's history.

A short introduction to the Avenue Carbonisation Plant, Wingerworth

Philip Cousins

Our July 2022 meeting heard about how the Avenue Carbonisation and Chemical Plant, Wingerworth, was decontaminated in the 2000s. As a background this history bite (first published as a post on our website) looks at the opening of the works in the 1950s, through to closure and decontamination.



Front cover of the Avenue works inauguration programme. The Rt. Hon. Aubrey Jones, MP, then minister of fuel and power, inaugurated the works.

The works were officially inaugurated on 30 October 1956 with much celebration - photos here are taken from the official brochure marking the event.

The plant was described as 'the largest single contract yet placed by the National Coal Board ...'with the event marking '... the beginning of full-scale operation of the Board's largest and most up-to-date coal carbonising plant'.

The plant was originally designed to be doubled in size if needed, to be fully integrated and use coal from 'locally-mined coals of lower rank'. Construction had started on the site in 1952.

From the start it not only produced coke from coal but also refined by-products from the conversion. These included benzole, crude tar, sulphuric acid and sulphate of ammonia. Taken together this led to the site, which finally closed in 1992, being branded one of the most polluted in Europe.

It's difficult to imagine now what impact this works had the local topography and indeed environment. It did, of course, create jobs and built a 'community' which around industrial complexes such as this – sports activities, etc.



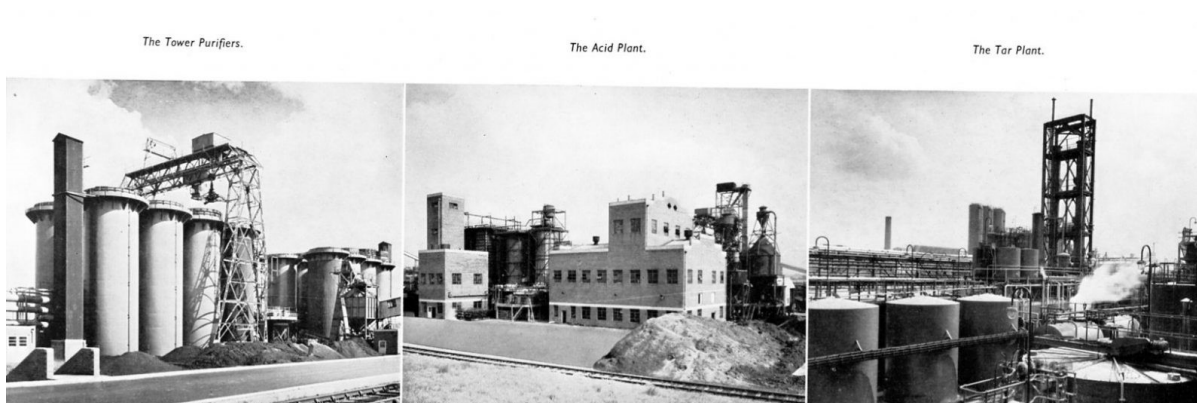
General view of the former plant, from the north-west.



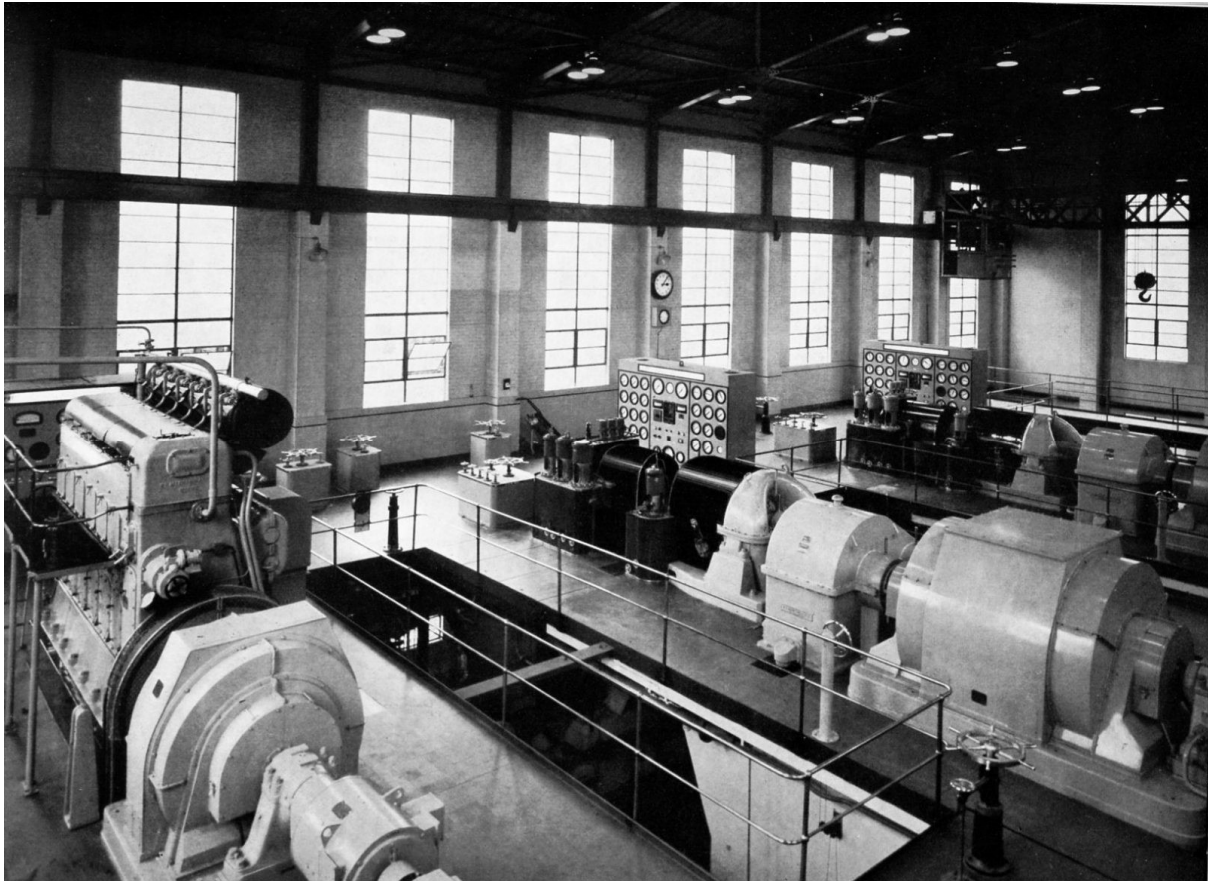
A night-time view of one of the two Woodall Becker Compound carbonisation oven batteries. Each had 53 ovens, in side-by-side banks. The works were expected annually to carbonise about 750,000 of coal, producing 500,000 tons of solid smokeless fuel for domestic use and over 5,000 million cubic feet of town gas (i.e. gas from the carbonisation process).

When opened the site, totalling 188 acres, was expected to take 475 people to run it. There were three miles of internal roads, over 10 miles of internal railway, with a further five miles connecting to the plant and for marshalling purposes. On closure more than 500 people were reported as working there, but at its peak it had employed some 800.

Produced coal ('town') gas was also used on site and exported, by pipeline, to the former Staveley Works and the glass works on Whittington Moor.



Some of the buildings on the site and their purpose - taken from the inauguration brochure. Centre is the Acid House, right is the Tar Plant.



The Power Plant with its standby diesel generator set to the left and two Allen steam turbo sets with English Electric generators to the right.

Pollution from the site was an ever-present issue. Nearby residents were subject to smells and a familiar sight for many years was a bright flare burning off gases

Following closure in 1992 the site was not fully decommissioned or demolished until it passed to the former East Midlands Development Agency in 1999. Demolition then took five years, with the subsequent decontamination costing some£172m. Over 90% of the site contamination is thought to have come from disposal of industrial waste by former operators - British Coal - in addition to pollution directedly from the various processes.

The July 2022 talk revealed just how the former Avenue Carbonisation and Chemical Plant was decontaminated. It featured Clive Paxton BSc.(Hons). MICE. C.Eng., Senior Associate Director of Construction (retired!) and David Stewart MEng (Hons) MICE C. Eng, Senior Associate Director. The talk was labelled "The Remediation of the Avenue Coking Works, Wingerworth - The biggest Environmental Clean-up in Europe!"



Our final photograph from the 1956 inauguration brochure - all is spick and span in the Exhauster House.

This article has been further edited from a post itself was edited on 21 July 2022 from the original one, which promoted the talk held on 18 July 2022.

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