

History Nugget for March 2019: From Gas to Electric Street Lighting

The Mitcham News & Mercury in 1959 reported that the council had reached *Stage 15* of its street lighting programme, and that 120 roads would soon have electric lighting in place of lamps lit by town gas.

This *town* gas was made locally, at the gas works in Western Road. Coal was delivered by rail to Benedicts Wharf, which had a number of rail sidings that came off of the rail line between Morden Road and Mitcham. Coal was then moved by road to the gas works.

The same newspaper in a 1933 described the process of making gas in a report of a visit by the Mitcham Rotary Club to the works.

The coal is placed in numerous hermetically sealed fire clay or silica containers called retorts which are heated to a temperature of approximately 2,000 degrees F. by a mixture of furnace gas and air, which circulates round the retorts. There is practically no limit to the number of retorts used. At the Mitcham Works there are 192 working continually, each retort containing 12 cwt of coal, which remains in the retort for 12 hours, after which all the gas has been extracted from the coal, and approximately 9 cwt of coke left. Another charge is placed in the retort, which again remain for a period of 12 hours. From the foregoing figures it will be seen that at the Mitcham Works approximately 200 tons of coal per day are used for gas production.

Subsequently the gas is drawn away by means of a rotary pump, called an exhauster, through a series of condensers, which cool the gas to atmospheric temperature, and in so doing a portion of tar is recovered in the form of the dark thick liquid which is well known. From the condensers the gas travels through a series of cast iron or steel rectangular vessels known as scrubbers, where, by washing, the ammonia is released, the final liquid, consisting of water and ammonia, being termed ammoniacal liquor.