



## *Account of Purley on Thames*

# Gas Supplies

### *Background*

Gas as a source of heat and light dates back to the end of the 18th century when William Murdock set up a small experimental gas works in 1795 to serve parts of Birmingham. The first large scale production of coal gas was in London when in 1813 the London and Westminster Gas Company was formed. This later became the Gas Light and Coke Company. There was rapid expansion and over the period from 1820 to 1860 almost every town of any size acquired a gas supply.

Originally gas was obtained from coal and there were two quite distinct processes. In the first the coal is heated out of contact with air so that it decomposes with gasses being given off and a hardened residue called coke left behind. The gasses consist of gaseous tars, carbon mon-oxide hydrogen and methane plus residual water vapour, carbon di oxide and Nitrogen. The water and tars are condensed out and separated to form many useful by-products and the result is a highly combustible mixture which can be piped to a home or factory.

The initial use was as a source of light and it was in fact the first continuously burning light source which did not need constant replenishing as for example candles and oil lamps demand. Thus for the first time it became practicable to provide lighting in the streets and Municipal Authorities were enthusiastic customers.

Gas burns with a yellowish flame and in the early days there was an open pipe with a valve to control the rate of flow and the gas was burnt directly rather like a candle. Later the gas mantle was invented consisting of a porous sheath fed from inside so that the gas is burnt at the surface to produce a much more even light and a higher level of illumination. For street lighting purposes a man would be employed to visit all the gas standards in the streets to light the lamps at night and turn them off in the morning. To make his job easier a small pilot light was left on, fed from a very narrow open tube and all he had to do was to operate a lever to open or close the main valve.

There were other methods to produce for example water gas (steam acting on red hot coke) or producer gas (blowing air through burning coal or coke) but these produced gases of lower calorific value and were useful for other purposes, rather than for lighting, for example industrial furnaces. Water gas was occasionally mixed with coal gas to produce a more consistent final product.

The advent of electricity in the 1880s spelled the end of the use of gas as an illuminant, although it was not until the 1950s that it ceased to be used for this purpose. Thus the gas companies had to seek for other uses and they successfully promoted its use for cooking and heating.

The 1920 Gas Regulation Act made a number of important improvements for the consumer. First it required that it was to be charged for on the basis of calorific value, rather than simple volume. This stopped certain gas companies from diluting their product to effect an increase in charges. The second measure controlled the pressures and required a minimum of a 2 inch water pressure in all mains over 2 inch diameter. The regulations also required the removal of sulphur gases, such as hydrogen sulphide which is both poisonous and objectionable. (ref 16)

### *The Pangbourne Gas Company*

The Pangbourne Gas company was established on a site between what is now St James Close and the Railway. Its service area was the parishes of Pangbourne, Purley, Whitchurch, Sulham, Tidmarsh

and Englefield although it is doubtful whether it ever served any of the outlying areas. It was certainly well established by the turn of the century but its exact date is not known.

The Reading Gas company had been established much earlier when the Reading Gas Light Company opened its works near bridge Street Wharf in 1818. A second company, the Reading Union Gas Company started at its own works at Gas Lane in 1830. While this resulted in much lower prices for the consumers the effect was that neither company could survive so they merged in 1862 as the Reading Gas Company.

A new gas works was built in 1872 where the Great Western Railway crossed the River Kennet and the old site sold to Huntley and Palmers. (ref 595)

In 1924 the Reading Gas Company took over the Pangbourne Company and soon afterwards closed the Pangbourne works. With the acquisition of their service area it now became permissible to provide a supply to Purley from Reading. (ref 592)

In the summer of 1924 therefore a new twelve inch steel main was laid along the Oxford Road to connect Reading to Pangbourne and in October 1925 a 300 yard spur of 3 inch main was laid down Purley Lane to serve Purley Lodge and Purley Lodge Cottage. This was done at the behest of the Hodgkin's who had to pay the costs of the spur. Gas provided lighting, heating and cooking at the Lodge and they also provided a single mantle lighting supply for their servants in the living room of the Cottage and two bedroom were supplied with a flare (ie no mantles) (ref 13-1/84, 185-1)

The Supply to Purley Lodge was extended in June 1927 when 330 yards of three inch main was laid along Purley Village to serve the Rectory This was further extended in September 1936 into New Hill at a cost of £73.17s.5d (ref 185)

Further expansion came in April 1932 when 270 yards of four inch steel main was laid in Glebe Road and Westbury Lane at a cost of £127.16s.11d This too was further extended by 598 yards in June 1937 at a cost of £250.7s.0d. Further extensions in Glebe Road came in 1947 and 1951. (ref 185)

Beech Road was served in September 1947 when 424 yards of four inch spun iron main was laid (ref 185)

### *Nationalisation*

The Gas Act of 1948 brought all 1037 Gas Companies into public ownership. This took effect on May 1st 1949. Twelve area Boards were established and Reading Gas became part of the Southern Gas Region.

Under the Southern Gas Board expansion proceeded gradually and most new estates were provided with a gas supply as a matter of course. The use of gas for lighting purposes had declined almost to nothing but it was a strong contender for cooking purposes and there were many industrial outlets for the product.

Some progress was made with gas fired central heating systems but there was strong competition from a more responsive oil industry and there was a marked reluctance on the part of the British public to invest in the greater comfort that central heating could bring

### *Natural Gas*

It was the Dutch who first became aware of the vast supplies of natural gas beneath the north sea and they rapidly adapted their gas supplies to take advantage of the new source of energy. Unfortunately they expanded too fast and ran of supplies prematurely.

Britain was very much more cautious, some might say that British Gas Boards lacked initiative, but gradually the North Sea gas field were opened up and copious supplies came ashore, mainly through East Anglia. Natural Gas is very much more calorific than coal gas and is virtually

odourless.

British Gas set about converting its supply systems one by one. Because of the higher calorific value it was necessary to convert all the burners in all the central heating systems and stoves to make them safe to burn the new fuel. It was also necessary to add a 'smelling agent' so that people could detect when there was a leak or a gas tap had been left on.

The Purley area was converted around 1975 by which time central heating had become almost standard and few homes were without it. The price of oil and its inherent inconvenience compared with gas had meant that most homes were using gas for central heating, although a significant proportion opted for electric heating.

The result was the closure of the Reading Gas works in 1966 although the gasometers continue to be used to store gas. It is now all natural gas pumped up from Southampton where it is landed from bulk carriers either from the north sea or elsewhere.

By 1980 the prospects for gas and its general image with the public had changed dramatically, although the Gas Boards were seen as very overmanned and inefficient. The new Conservative administration targetted British Gas as one of its first candidates for privatisation and it was sold off in a public flotation in 1987.

It was then divided into two: British Gas retained the name and turned into an energy marketing company and Centrica took over all the pipelines and distribution network so that other companies could enter the market to sell gas. As a consequence both the electricity and telecommunications companies got into the act selling packages involving different combinations of energy supply and with discounts for people taking their supplies of the different commodities all from the same company. Over the years since then the privatised companies have been bought and sold, merged and demerged by multi-national conglomerates which most people find utterly bewildering.

### *The River Estate Campaign*

While all the other areas of Purley were provided with a gas supply, the River Estate had been excluded. This was for two reasons: one the water table is very high giving problems in laying underground piping and second the development had been piecemeal and gradual and no one person was prepared to pay the very high cost of bringing the first supply to the estate.

Several attempts were made during the 1960s and 1970s to persuade the Gas Board to provide a service but there were never enough people to make it viable. In the 1980s however things had changed somewhat in that by now almost all the old shacks had been replaced by modern houses and people generally were more affluent.

A vigorous campaign was launched by Jennifer Jones of Wintringham Way and others and finally an agreement was reached. The campaigners had to get 110 households to agree to pay a £255 connection charge and a £38 deposit, then Southern Gas would install the mains. This was eventually achieved and on Sunday 10th June 1984 New Hill was closed to enable a new main to be laid.

### *Bibliography*

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