

GAS

Melbourne has a reticulated gas supply system which covers almost the whole urban area, and conveys gas to some 360,000 consumers. At the present time this gas is dependent on coal shipped from New South Wales. More than 600,000 tons of Newcastle coal and 5,000,000 gallons of oil were used in 1952 to produce 10,500 million cubic feet of gas in the metropolitan area. The by-products from this gas production included 240,000 tons of coke and 6,250,000 gallons of tar, which were sold for fuel and road making.

During recent years, the supply of gas in Melbourne has been seriously affected by shortages of suitable gas-making coal, the supply of which has often been interrupted by industrial disturbances in New South Wales. The extension of services has also been curtailed since the war by an inadequate supply of piping for mains and services, but this shortage has now been largely overcome.

Sources of Supply

Melbourne's gas supply is controlled mainly by two undertakings. The Gas and Fuel Corporation of Victoria (formerly the Metropolitan and the Brighton Gas Companies) provides 85% of the metropolitan supply from its principal gasworks at West Melbourne, South Melbourne and Highett. This organisation at present supplies most of the metropolitan area east of the Maribyrnong River, including the bayside suburbs as far south as the border of Frankston. The Colonial Gas Association provides about 13½% of the metropolitan supply. From its works in Footscray it supplies the territory west of the Maribyrnong River, and from its works in Box Hill supplies a belt of territory extending from Box Hill to Oakleigh, with high-pressure mains to supply Dandenong and Frankston. The Mordialloc Gas Corporation supplies gas throughout the municipality of Mordialloc.

Approximately 80% of Melbourne's gas supply is consumed in the home, and there is an increasing use for industrial purposes. There is also a large consumption of gas in hotels and restaurants and for warming offices and factories.

Gas is distributed by pumping from the gasworks through pressure pipelines to governor stations and to district governors, which regulate the pressure of supply and keep it uniform. Altogether there are about 2,600 miles of mains and 4,500 miles of service pipes.

Proposed Additions and Future Capacity: Surveys of the coal resources of Australia have proved that the known reserves of gas-making black coal could last only a few decades at the present rate of consumption. None of this coal exists in Victoria, and it was apparent that long before the date of exhaustion those States possessing gas-coal would restrict it entirely for their own use. Consequently, it was of paramount importance that Victoria should further

exploit its almost limitless supplies of brown coal and introduce new processes for manufacturing gas from it. Ever since 1930 this matter has been under investigation by the Metropolitan Gas Company and much research work had been accomplished by the end of the war. In 1946 various processes were investigated in Germany and two German experts were brought out to report independently on the possibilities of using brown coal in the Latrobe Valley for the manufacture of gas. Following the report of these experts, the State Government decided to build plants at Morwell for the high-pressure generation of gas from briquettes by the Lurgi process, in which the brown coal is treated with steam and oxygen at 400 lb. pressure. The oxygen will be extracted from the atmosphere by two machines each capable of producing 84 tons a day. The initial capacity of the Lurgi gas plant will be 18,000,000 cubic feet of gas a day, about half the present total capacity of Metropolitan gasworks. The site has been selected for an ultimate output exceeding 100,000,000 cubic feet a day, or nearly three times Melbourne's present output of gas.

Gas will be transmitted to Melbourne by pipeline. Being generated and purified at 400 lb. pressure, it will require no further compression for transmission. The pipeline will enter a pressure breaking station 1½ miles south of Dandenong, and from there the gas will be transmitted at a moderate pressure to the distributing stations at Tooronga and Highett. Subsequently, a high-pressure pipeline will encircle the outer suburbs and feed inward towards the centre.

This plan is now fully under way, and the first plant will be in operation in 1956. Whenever plant at the metropolitan works wears out it will be replaced by equivalent capacity at Morwell until in 20 years or less it is anticipated that the black coal plants will be completely closed down.

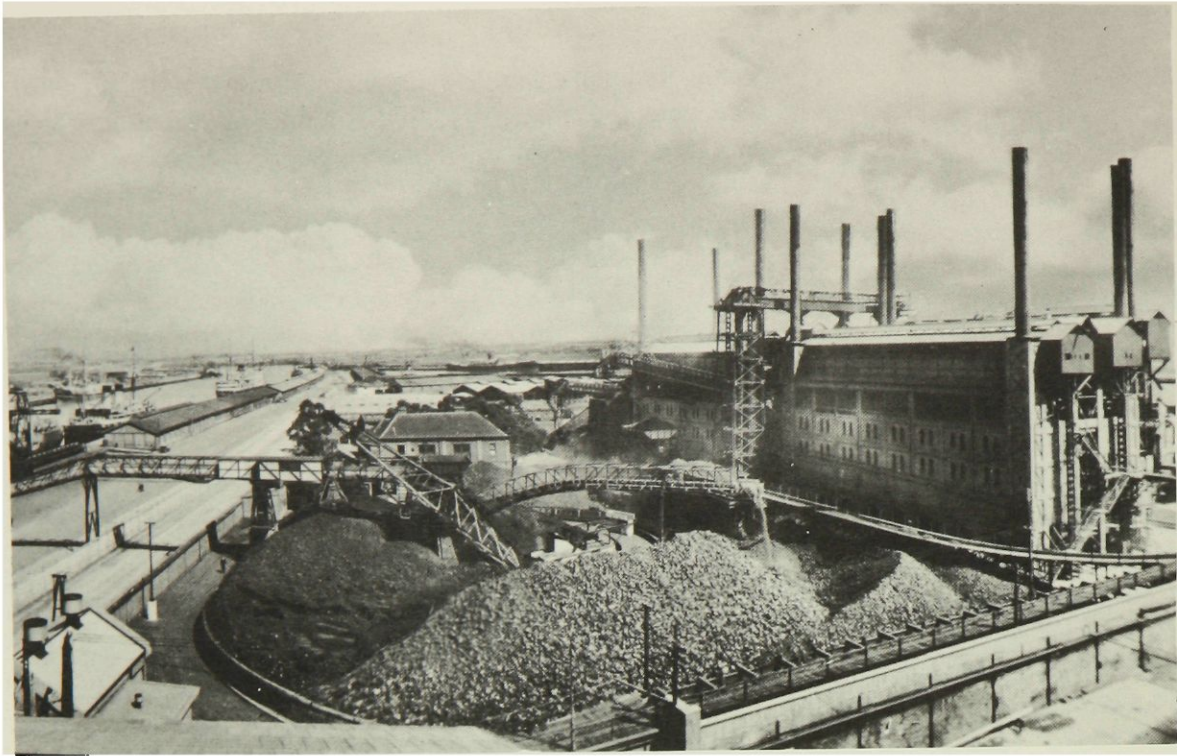
POST AND TELEGRAPH

The postal and telephone services of Melbourne, as in all Australian cities, are under the control of the Commonwealth Postmaster-General's Department.

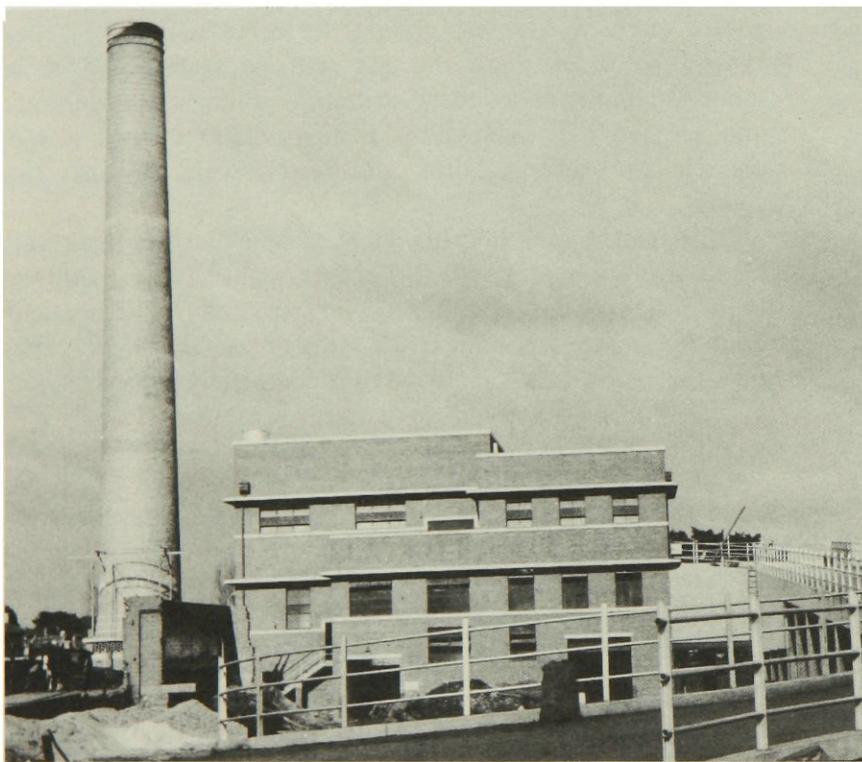
Postal and Telegraph Services: The postal services involve the handling of mail by means of some 420 post offices and house-to-house delivery services throughout the metropolitan area. There are two main groups of post offices, official and non-official. The official post offices are those maintained and staffed by the Commonwealth, while the non-official post offices are those conducted by persons outside the Commonwealth service. The increase in post offices in the metropolitan area of Melbourne in the past ten years are shown in the following figures:

<i>Post Offices</i>	<i>30/6/42</i>	<i>30/6/52</i>
Official	91	107
Non-official	266	313

Throughout the suburbs of Melbourne house-to-house deliveries are made twice daily on week-days and once on



West Melbourne Gas Works



A new garbage incinerator at St. Kilda

The telephone exchange operator

