

## Wallaroo Smelters — and the Hughes Chimney



John Drexel (Manager, PIRSA Publishing Services)

One of South Australia's and Australia's earliest successful mining ventures was based on the copper lodes at Moonta (Moonta Mines, operated by Moonta Mining Co.) and Kadina (Wallaroo Mines, operated by Wallaroo Co.), which collectively produced ~334 000 t of copper metal, 17 t of silver, 1.5 t of gold, 100 000 t of sulphuric acid, and 3200 t of copper sulphate.

Most of the smelting and metal production was carried out on the eastern shore of Spencer Gulf at Wallaroo, ~10 km northwest of Kadina. Construction of the smelters by the Wallaroo Co. began in 1861, two years after James Boor's discovery of copper carbonates at the site of the Wallaroo Mines.

By 1875, Wallaroo was one of the largest seaports in South Australia as water transport was the only means of bringing in coal for the smelters and shipping out of copper metal. The smelters were by far the largest in the state at that time. By 1876, Moonta Mining Co. had paid dividends totalling one million pounds, an enormous sum for that period and the first time that a mining company in Australia had reached this mark.

Continuing low copper prices forced the two companies to amalgamate in 1889 to better use their resources — the Wallaroo and Moonta Mining and Smelting Co. as it was known was then the largest company in South Australia.

Activity and prosperity collapsed at the end of the First World War owing to a fall in copper prices, dwindling ore reserves at the Moonta Mines, and severe shortages of coal because of strikes in the eastern states. The 2000 workers at Moonta and Wallaroo refused to accept a drastic cut in wages, and the company went into voluntary liquidation in 1923. Large stockpiles of accumulated ore and precipitates kept the smelters operating until 1926.

Many mining relics remain at Wallaroo, Moonta and Kadina, including Cornish pump houses, miners cottages, and the extensive tailings dumps, many of which can be visited and their purposes understood through the interpretive signs and trails established by PIRSA.

The most impressive relic at the Wallaroo Smelters is Hughes Chimney Stack, named after Sir Walter Watson Hughes, the pastoral lessee on whose property the

Moonta lodes were discovered, and later co-founder of the University of Adelaide. The square 43 m high stack was used to guide ships into Wallaroo Jetty. It is one of the most significant mining structures in Australia, and is on the Register of the National Estate.

Until recently, Hughes Chimney Stack has been in danger of deteriorating beyond repair due to rusting of its iron tie bars. These flat iron plates that tie the brickwork to reinforcing rods at each corner have rusted and expanded to almost three times their original size, resulting in the reinforcement, meant to hold the structure together, literally forcing the bricks apart. A large grant from the Federal Government's Cultural Heritage Projects Program, and smaller amounts from the District Council of the Copper Coast and Heritage SA, with a total value of \$150 000, will see the chimney stabilised and restored through a process of shotcreting, application of protective oils, and new metal bands to strap the entire structure.

*PIRSA acknowledges the Yorke Peninsula Country Times ([www.ypct.com.au](http://www.ypct.com.au)) for the idea of this article, and information on the restoration project.*



Wallaroo Smelters viewed from the Wallaroo Jetty ~1910. The plume of sulphur and carbon-rich smoke was seen for kilometres, and became a well-known landmark. Hughes Chimney Stack is the black, widest chimney near the centre of the image. (Photo N10758).