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Station boilers get a thorough cleaning

Progressive cleaning has started on the eight massive boilers located in the heart of Hazelwood Power Station.

These boilers, standing idle since closure, were an integral part of the process of producing electricity for 52 years.

Local contractor AsClear is well into the huge task of cleaning the boilers and associated plant, including removing all leftover fuel, as part of the decommissioning stage of the project

A team of around 90 employees, working two shifts for 24 hours a day, is currently finishing off Units 5 and 6, after completing Units 7 and 8.

Specialised equipment on vacuum trucks, located in the basement of the station, sucks out ash and dust from the boilers and associated areas.

AsClear supervisor, Bruce Youl, said the boiler combustion chambers were huge and, fortunately, an internal cleaning mechanism had been installed to avoid employees having to go inside to carry out this work.

However, employees must work in the confined spaces of the associated boiler plant, such as vestibules and economisers.

“It is a very difficult job but the whole operation is progressing very safely and smoothly,” Mr Youl said. “The results being achieved are excellent.”

Mr Youl said each boiler comprised a large chamber, 50 metres high and weighing 1800 tonnes.

When the boilers were operating, hot gases from the combustion chamber were used to dry the coal just before it entered the boiler so the coal could burn more efficiently. The burning coal reached temperatures in excess of 500 degrees celsius, heating the water in the steel tubes covering the boiler walls. More than 174 tonnes of water circulated through these tubes.

Water then rose through the tubes into the boiler drum, turning first into steam and then into superheated steam at 215 degrees celsius.





The high-temperature and pressure steam was fed into the multi-stage steam turbine. As it passed through each stage of the turbine, both the temperature and pressure fell as the steam drove the turbine shaft at around 3000 rpm.

The cleaning of the boilers and associated plant is expected to take more than two months to complete and is part of the overall decommissioning of the station.

A systematic approach over 12 months will involve further draining, containment of hazardous materials, disconnecting electrical supplies, further cleaning, making sure the site is secure, managing ongoing security, clearing buildings and organising salvage activities.

This ensures the facility is left for demolition to be carried out in a safe and environmentally responsible manner.

