

# PLUMBING ON ICE

Jason Ahrens spoke to Annie Rushton about his experiences as a plumber in Antarctica.

I have been interested in Antarctica since high school, but it took nearly 30 years to get here. I am one of two wintering plumbers at Davis, and the Building Services Supervisor for 2007. I gained my ticket as a plumber and gas fitter, and went on to do mechanical services a few years later. Most recently, I worked in the domestic market in Victoria.

A major summer plumbing job here at Davis is to make a year's supply of potable water – over a million litres. Davis obtains its water by reverse osmosis from a small tarn, which entails about three hours of work every day. The job has been an eye-opener, as few plumbers have worked with reverse osmosis plants back home. In fact, it is the challenges of working in Antarctica that really appeal to me.

Unlike in Australia, you can't just go out and buy spare parts, and because of the environment, everything takes ten times as long. You need to consider alternatives and improvise. This is one of the great attractions for me, as you have to think laterally, and we all help each other in a way that rarely happens at home. Electricians assist us and we help carpenters and vice versa. The same trend applies to station life generally. During resupply for example, everyone downs tools and helps. I drove machinery, moved containers and worked as beach master, liaising between ship and shore. We also take turns to do kitchen slushy duties and general station cleaning.

I am also the Deputy Station Leader, and take responsibility for the station when our Station



BARRY BALKIN

Leader is absent. Both he and I are invested with legal Special Constable powers, and are designated as Antarctic Treaty Inspectors, which means we monitor project permits.

Other trades-related jobs include maintaining the 'heart and lungs' of the station – the ventilation and heating systems – in particular the heating hot water circulation to all buildings. We also ensure that the sewage system functions effectively and manage waste management operations, including incineration of burnables in high temperature incinerators. We record waste categories and quantities as part of the Australian Antarctic Division's (AAD) environmental management system.

As the wintering Building Services Supervisor, I supervise the carpenter, two electricians, another plumber and a trades' assistant. This winter our work will focus on the internal fit-out of the new summer accommodation module, in preparation for next season.

We keep food frozen and maintain station gas supplies, including kitchen cooking facilities and medical gases. We test the medical gases each month with the doctor, to ensure that the regulators and alarm systems are functional.

Working with medical gases was quite new to me, but the AAD organised training for me. In fact, I undertook extensive training, including in backflow prevention and maintaining oil fired boilers (not commonly used in Australia). I also gained an articulated loader ticket and forklift licence, did the specialised Breathing Apparatus fire training, and am in the Davis first response team for search and rescue.

Towards the end of summer, I assisted a scientific programme on the Lambert Glacier to return their equipment to station by helicopter. It was a fantastic experience just to fly down. We flew over the glacier and Progress and Zhong Shan, the Russian and Chinese stations.

Living in a close community is very different to being at home. Without a doubt, the most important attribute here is tolerance; we live and work together and you have to be diplomatic.

A key feature of life in Antarctica is that we are all keen to be here, and prepared to work together to get things done. Although there are always different challenges, you get all the support you need from your mates, the station leader, and staff at Kingston. You don't have to do anything alone, and that is very special.



JASON AHRENS