



THE BARTON ASSESSMENT AREA Community update #3

Issued 28 February 2018

The EPA is undertaking environmental assessment work in Thebarton, where groundwater contaminated with [trichloroethene \(TCE\)](#) has been found in the vicinity of a former metal processing site on George Street. This is part of an ongoing 'orphan site' program, where the original polluter is not able to carry out the work and the site has been prioritised based on the potential for a risk to health.



Stage 2 work commences in 2018

During the first stage of groundwater and soil vapour assessment, the extent of the groundwater contamination was largely determined. Further work is required to find the boundary of the contamination in the north-western portion of the assessment area.

Maps showing results from the soil vapour and groundwater sampling wells are available on the EPA website – www.epa.sa.gov.au (follow the links to 'site contamination' then 'assessment areas').

The risk of vapour from groundwater entering into residential indoor air has been assessed, with computer modelling predicting the majority of residential properties in the area to be safe. See overleaf for further information on mitigation work underway at the homes where vapour intrusion was found.

Mitigation work underway

When contaminated groundwater enters the indoor air of homes as vapour through cracks in floorboards or concrete slabs, a ventilation system may need to be installed. The EPA uses an [‘Indoor air level response range’](#) for TCE, which considers long term exposure levels (24 hours a day, 7 days a week over a lifetime of 70 years) to determine when this is required. Mitigation work has been undertaken by the EPA where levels of TCE inside a home have measured in the ‘Intervention’ category of the *Indoor air level response range*.



Photo courtesy ABC News 31 January 2018 – Beverley resident and EPA staff member with one of the fans used to mitigate vapour.

In what is believed to be an Australian first, the EPA successfully installed vapour mitigation systems into residential homes to reduce indoor air concentrations of TCE to safe levels.

The EPA installed three mitigation systems, or ventilation systems, in Beverley as part of a pilot trial to test international research and technology to determine whether it could be applied in South Australia. In Thebarton, Renewal SA is working with the EPA to mitigate six affected homes. Renewal SA is undertaking the design, planning and construction of the mitigation systems. Validation testing to ensure the effectiveness of the systems by testing the indoor air after installation will be undertaken to demonstrate that the properties are safe.

Bore water

The EPA reminds residents that groundwater (bore water) in this area is contaminated and should not be used for any purpose. Commercial operators accessing the much deeper Tertiary aquifer are required to test regularly.

Home grown vegetables safe

Contaminated groundwater generally does not contaminate the soil above it. Soil, rainwater, and mains water are not affected. Home grown vegetables are safe to consume, provided you are not watering them with bore water.

Basements

Soil vapour intrusion into indoor air is more likely to occur if a room is near groundwater. If your home has a basement, please contact the EPA to find out if you are exposed to any increased risk.

FURTHER INFORMATION

For **further information** please contact:

Site Contamination Branch
Environment Protection Authority
GPO Box 2607, Adelaide SA 5001
Telephone: (08) 8204 2004
Email: engage.epa@sa.gov.au
Website: www.epa.sa.gov.au

(Follow the link at the bottom to Site Contamination then to Assessment Areas to find the Thebarton page.)

For **health** related information please contact:

Scientific Services Branch
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11 Hindmarsh Square, Adelaide SA5000
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