



Community update

Issued Tuesday 23 May 2017

South Australia has a proud manufacturing history and some chemical disposal and handling practices in these industries that were considered appropriate at the time are no longer acceptable by today's environmental standards. As a result of these historical practices, the EPA holds almost 2,200 records on sites that have been listed on the EPA Public Register and many of these are detailed environmental assessments that enable the future development of land.

In the Thebarton area, the EPA received several reports from 2000-09 which showed that past industrial practices have caused site contamination affecting groundwater at a site on George Street. In 2016 a notification was provided to the EPA from a second site in Smith Street.

While it is not economically feasible to assess every contaminated orphan site, the EPA prioritises sites that have the potential to present a health or ecological risk. Thebarton is next on the EPA's prioritised works programme to undertake further investigations.



Thebarton – orphan site

Responsibility for site contamination is assigned according to the 'polluter pays' principle – the original polluter is liable for clean-up and associated costs on and off the source site, regardless of when it was caused. The EPA ensures responsible parties undertake this work appropriately and makes information on contaminated sites available to the public http://www.epa.sa.gov.au/our_work/public_register.

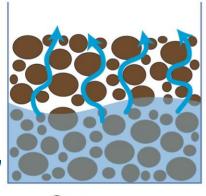
Sometimes identifying the polluter is difficult because it is often the result of previous industrial activity or activities that may have occurred a long time ago. Understanding the timing of the contamination and identifying the polluter is therefore not always possible, and in some cases companies identified as polluters in the past no longer exist. An 'orphan' site is where the original polluter no longer exists, cannot be determined or is unable to carry out or pay the costs of assessment or remediation.

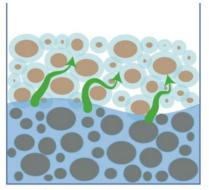
The EPA is undertaking work in Thebarton to assess the extent of the groundwater contamination, to understand if vapour contamination is present and to identify whether sites identified as potential source locations are sources of the contamination. On behalf of the SA government, the EPA manages the legacy of existing contaminated orphan sites.

Soil vapour migration

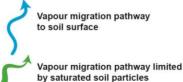
Soil vapour migration pathway in dry conditions

Soil vapour migration pathway limitations in moist conditions









It has long been understood that volatile chemicals can be transported in groundwater. More recently it has been discovered that they can also be found in the air spaces between soil particles as vapour.

In the rare instance that a home is affected by soil vapour intrusion, the EPA works with residents to assist them with managing any risk. Many areas with groundwater contamination pose no or very low risk of soil vapour intrusion and are considered to be safe. In other areas simple precautions can prevent vapour build up, such as increasing the flow of fresh air from outside to inside or below a house (opening doors and windows, clearing blockages away from vents and sealing skirting gaps). Where there is significant vapour intrusion a ventilation system can be installed.

In order to determine whether soil vapour intrusion is occurring in the Thebarton assessment area, the EPA is undertaking works to gather more data to understand the composition of the soil vapour, and whether any additional assessment works are required. At this stage all works are planned to be undertaken in road verges and are not required to be on private properties.

Works schedule

The EPA does not hold any information that indoor air in Thebarton is affected by soil vapour intrusion. The work is part of a program to obtain further information, as the historical reports held by the EPA were completed before this was widely considered as an exposure pathway. The installation of 37 temporary bores containing soil vapour samplers will commence in June and be in place for approximately seven days.

Twenty groundwater monitoring wells will be installed at the same time, and depending on the results of the temporary soil vapour bores, 15 permanent soil vapour bores may be installed. Results are expected to be analysed and communicated to residents by September 2017.

Bore water

Residents should not use bore water in this area for any purpose. Commercial operators accessing the much deeper Tertiary aquifer are required to test regularly.

Home grown vegetables safe

Soil, rainwater, and mains water are not affected. Home grown vegetables are safe to consume, provided you are not watering them with bore water.

FURTHER INFORMATIO

For further information please contact:

Site Contamination Branch Environment Protection Authority GPO Box 2607, Adelaide SA 5001

Telephone: (08) 8204 2004

Email: EPASiteContam@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:

ornaot.

Scientific Services Branch

Public Health Services, SA Health

11 Hindmarsh Square, Adelaide SA 5000

Telephone: (08) 8226 7100

Email: public.health@health.sa.gov.au

Website: www.sahealth.sa.gov.au

