

Glenelg East

Environmental assessment program – November 2015

What is the environmental assessment program?

The environmental assessment program will assist the Environment Protection Authority (EPA) in understanding the nature and extent of contamination originating from the Glenelg Dry Cleaners (GDC) site, located on the southern side of Cliff Street, Glenelg East. Contamination on this site occurred historically when tetrachloroethene (PCE) was used in the dry cleaning industry.

What work has been undertaken in the area previously?

Assessment work first undertaken at the GDC site in 2004 identified PCE in the groundwater. The groundwater is located, on average, around four metres below the surface and moving naturally in a north-westerly direction. Trichloroethene (TCE) and dichloroethene (DCE) were also identified, which are breakdown products of PCE. Further assessment work completed in 2011 and 2012 confirmed the presence of these chemicals in soil vapour on the site. Soil vapour is the gas that forms when chemicals in the soil or groundwater evaporate.

In April 2015, the EPA undertook a further round of assessment to understand the nature and extent of potential off-site contamination in the groundwater and soil vapour to the south, west and northwest of the GDC site.

What were the results of the most recent round of assessment?

Previous assessment reporting concluded that the full extent of the groundwater and soil vapour contamination in the area has not yet been determined, as concentrations of PCE, TCE and DCE were detected in some of the groundwater wells and soil vapour bores at sampling locations near the boundary of the assessment area.

SA Health reviewed the report and provided preliminary advice based on the available data. While this advice indicated there were no immediate health concerns, SA Health and EPA determined that further assessment work is required across an expanded assessment area, to find the full extent of the contamination, and to complete a vapour intrusion and human health risk assessment for the area.

What does the assessment process involve?

There are several stages to the assessment process, outlined in the diagram below:



What work needs to be done?

Samples will be collected from all existing groundwater monitoring wells and soil vapour bores in the area to validate the previous results and allow for potential seasonal variations. A number of additional groundwater monitoring wells and soil vapour bores will also be installed on public within the expanded assessment area.



Small caps will be placed over each testing location

The planned assessment works will include installation of:

- 8 new groundwater wells, up to 6 metres deep,
- 9 new soil vapour bores at 1.5 metres deep,
- temporary soil vapour sampling equipment beneath the floorboards of the property adjacent the GDC site.

Consultants will also be visiting some properties within the assessment area to gather information about housing construction types. This information is used to inform the risk assessment and analysis of results. All work will be delivered by specialist site contamination consultants, Fyfe Earth Partners.

What will I see in my street?

Work to install the different types of groundwater wells and soil vapour bores will happen over 2 to 3 weeks. Different teams install the different types of wells, so you may see people coming and going from your street intermittently during this time.

The groundwater wells will be installed using a drill mounted on a large truck. The soil and soil vapour wells will be installed using smaller 4WD vehicles with drills mounted on the back. You can expect to see small teams of 2 to 3 people at each location. Team members will be wearing standard safety equipment including high visibility clothing, steel cap boots, safety glasses and gloves.



A soil vapour bore being drilled on a road verge

Sampling will occur a few weeks later, once the wells have settled. It usually takes between 2 and 4 hours to collect each sample and the work will be completed by small teams of 1 or 2 people. There may be some local traffic management in place when teams are working in the street, however streets will remain open for local access.

Will I be able to see the results?

Yes, all results will be made available to the public on the EPA website and the EPA Public Register. The EPA expects final reporting to be completed in February 2016.

The results will be published as a full report and include a vapour intrusion and human health risk assessment. The full report is prepared by the consultant and provided to the EPA as the regulator for consideration and determination of next steps. Residents in the assessment area will be notified when the full report and risk assessment is available. Residents will be provided with a written summary of the main findings along with information about how to access the reports online.

Can I drink water and grow fruit and vegetables?

Mains water provided by SA Water and water from rainwater tanks is not affected by this issue and is safe to use as normal. Previous advice to residents from the EPA to not use groundwater (bore water) for any purpose remains in place until further notice. SA Health has advised that home grown fruit and vegetables are safe to consume, provided they are not watered using contaminated groundwater.

More information

If you would like more information about the environmental assessment program please contact the EPA Stakeholder Engagement Team on 1800 729 175 or at EPASiteContam@epa.sa.gov.au.