

## Mitchell Park

### Results of validation assessment program

#### Background

In 2014, the Environment Protection Authority (EPA) undertook a comprehensive environmental assessment program in Clovelly Park and Mitchell Park.

The assessment program, completed in December 2014, detected the presence of trichloroethene (TCE) in some of the soil vapour, soil and groundwater samples collected from the assessment area. The assessment program also provided a predicted TCE indoor air level for each individual property located within the assessment area. This prediction was determined by a computer model that used groundwater, soil vapour and soil data collected at various depths combined with a number of factors including soil type and moisture, depth to groundwater, building construction type and local geology.

The indoor air results identified two areas along Woodland Road, Mitchell Park in which the properties had a predicted indoor air concentration of less than 2 micrograms of TCE per cubic metre of air ( $\mu\text{g}/\text{m}^3$ ). This result identified the properties as safe, with no health risk to any occupants, however given the very low numbers, further assessment work was recommended to validate the December 2014 results.

#### TCE indoor air level response range – December 2014



#### Validation assessment program

In March 2015, the EPA and its environmental consultant Fyfe Pty Ltd, commenced an assessment program to validate the results of the predicted TCE indoor air levels for properties along Woodland Road, Mitchell Park. For the purpose of reporting, the two areas are called the southern and northern validation assessment areas.

The different stages of the validation assessment program are outlined in the diagram below:



The stages of the validation assessment program are consistent with the stages of any environmental assessment program. This ensures the work is undertaken using a multiple-line-of-evidence approach, to ensure robust science, quality assessment and reliable results are achieved.

**Results**

The July 2015 results of predicted levels of TCE in indoor air for all properties along Woodland Road, Mitchell Park show the same 'safe' indoor air response level as the results of the December 2014 assessment report. **This confirms that there is no health risk to any occupants of properties along Woodland Road.**

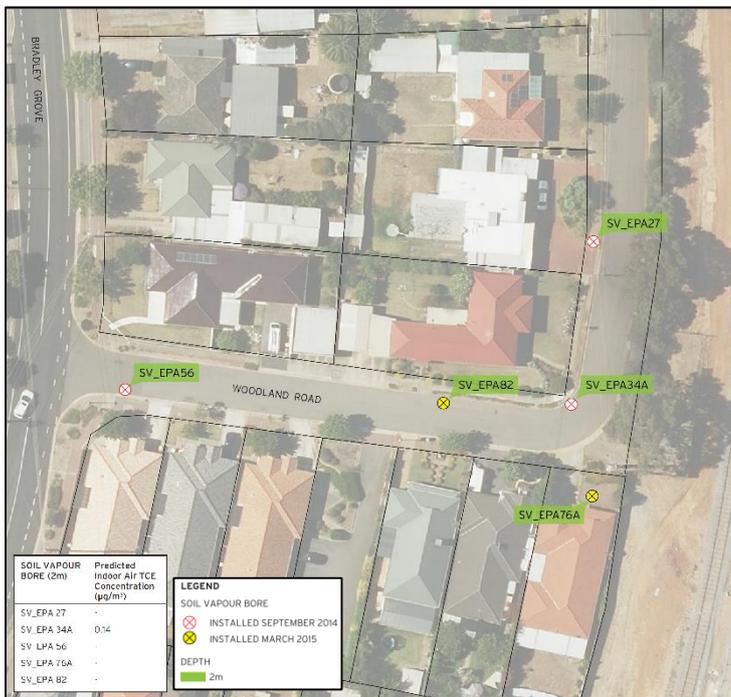
The highest predicted indoor air result measured 0.17 micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ ) of TCE, similar to the December 2014 assessment results for Mitchell Park. An indoor air level of below  $2 \mu\text{g}/\text{m}^3$  is considered safe.

**Northern validation area:**

The July 2015 modelling of predicted TCE indoor air levels are consistent with the results of the December 2014 assessment report.

The July 2015 results show the validation sampling work, testing, interpretation and modelling of predicted indoor air levels for properties along northern Woodland Road to be between 'non-detect' and 'less than 2 micrograms' per cubic metre ( $\mu\text{g}/\text{m}^3$ ) of TCE.

The results remain within the 'safe' indoor air level response range.



**Southern validation area:**

The July 2015 modelling of predicted TCE indoor air levels confirm that the results of the December 2014 assessment report are reliable.

The July 2015 validation assessment results have determined the predicted indoor air levels of TCE for properties along southern Woodland Road are now below detection limits.

The results are now within the 'safe' (nothing detected) indoor air level response range.

**More information**

If you would like more information about the validation assessment program please contact the EPA Stakeholder Engagement Team on 1800 770 174 or at [EPASiteContam@epa.sa.gov.au](mailto:EPASiteContam@epa.sa.gov.au).

The assessment reports are available online at [www.epa.sa.gov.au](http://www.epa.sa.gov.au). Follow the 'Site contamination investigations' link on the homepage, then select 'Clovelly Park – Mitchell Park'.