South Australia's Environment Protection Authority

Beverley and surrounding suburbs
Community Working Group

Tuesday 16 June 2015

EPA
South Australia

1. Welcome and introductions

Welcome and introductions

- The EPA Project Team
  - Technical specialists
  - Stakeholder engagement team

Agenda

1. Welcome and introductions
2. Round the table introductions
3. Terms of Reference
4. Background
5. Timeline to date
6. Current assessment program
7. Results and next steps
8. Question and answer
9. Community Engagement and Communication
10. Next meeting and actions

2. Round table introductions

Round table introductions

- Your name
- Which street you live on
- Why you are attending the Community Working Group (CWG)
  - What would you like to understand?
  - What questions do you have?

3. Terms of reference

Terms of Reference

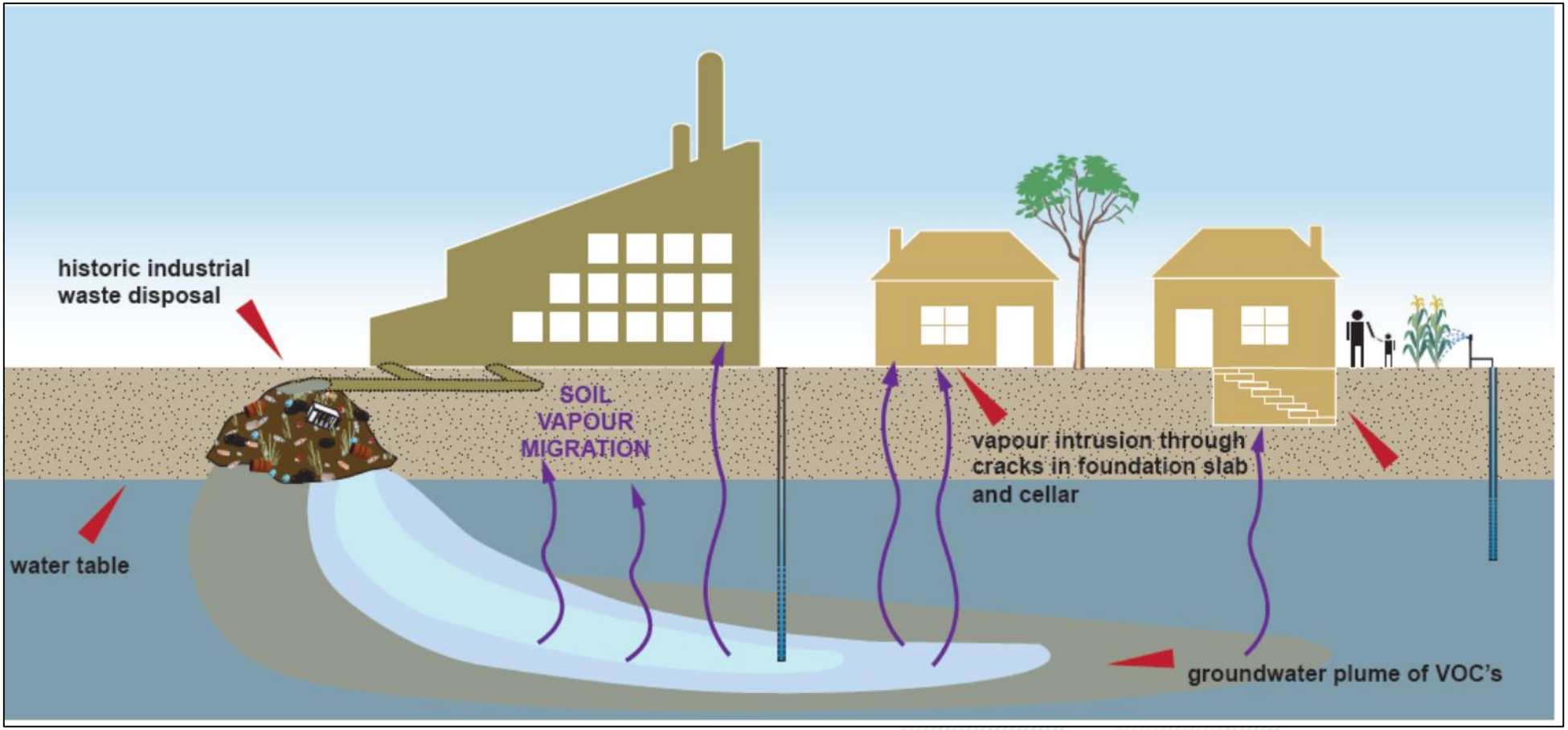
- Purpose of the group
- Membership and privacy
- Meeting specifics
- Conflict resolution
- Communication protocols
- Media protocols
- Meeting notes and documents

4. Background

What is TCE?

- TCE used widely across Australia and internationally
- Common uses:
  - Metal cleaning and degreaser in industry
  - Manufacture of adhesives, lacquers, dyes perfumes and soaps
  - Previously used to produce decaffeinated coffee
  - Dry cleaning
  - Anaesthetic in the past
- Used in a number of factories in the Beverley industrial area, by a range of businesses
- Recommended disposal method was to pour on soil to allow evaporation away from water courses

How does TCE contamination occur



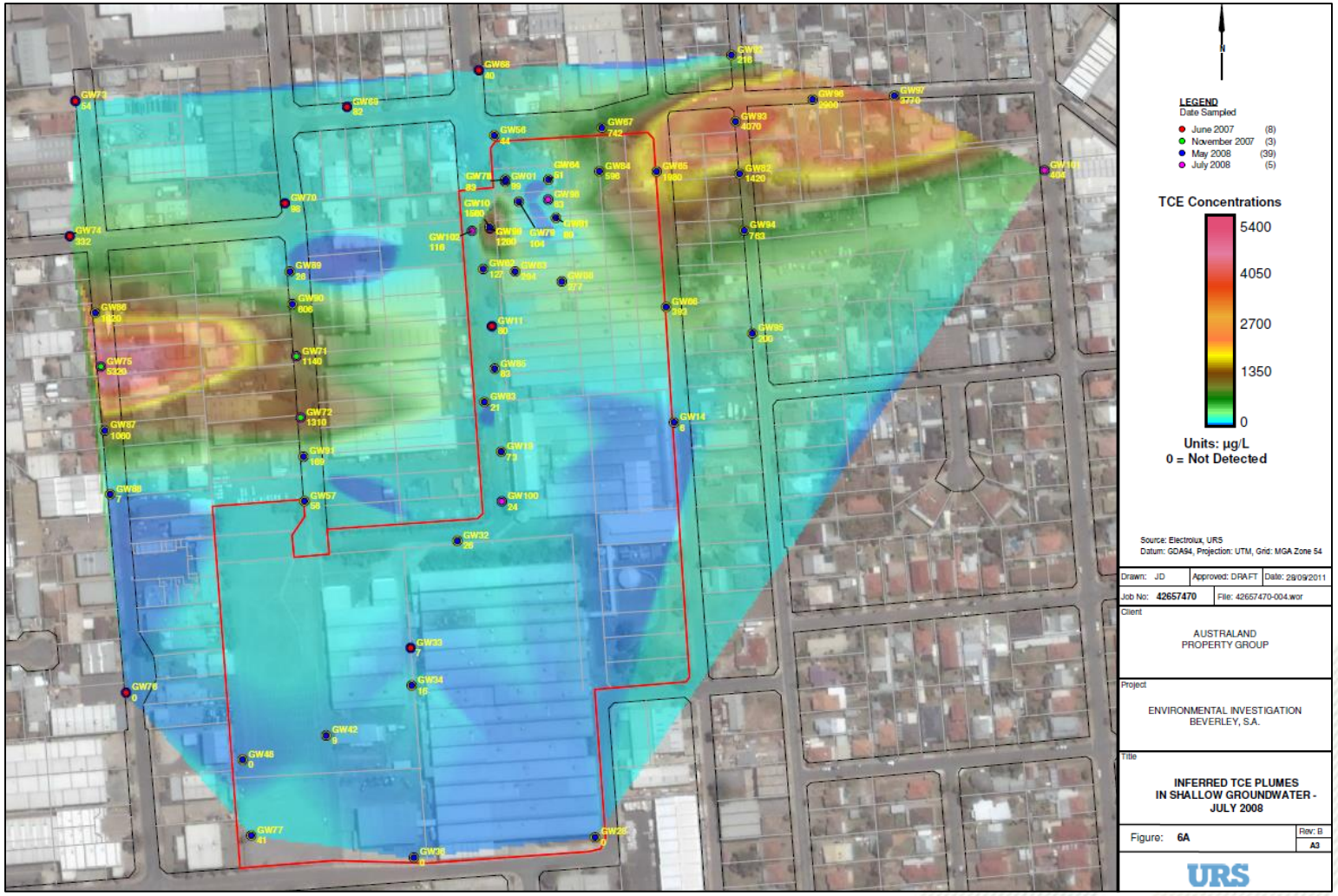
5. Timeline of EPA assessment works

Previous EPA assessment works

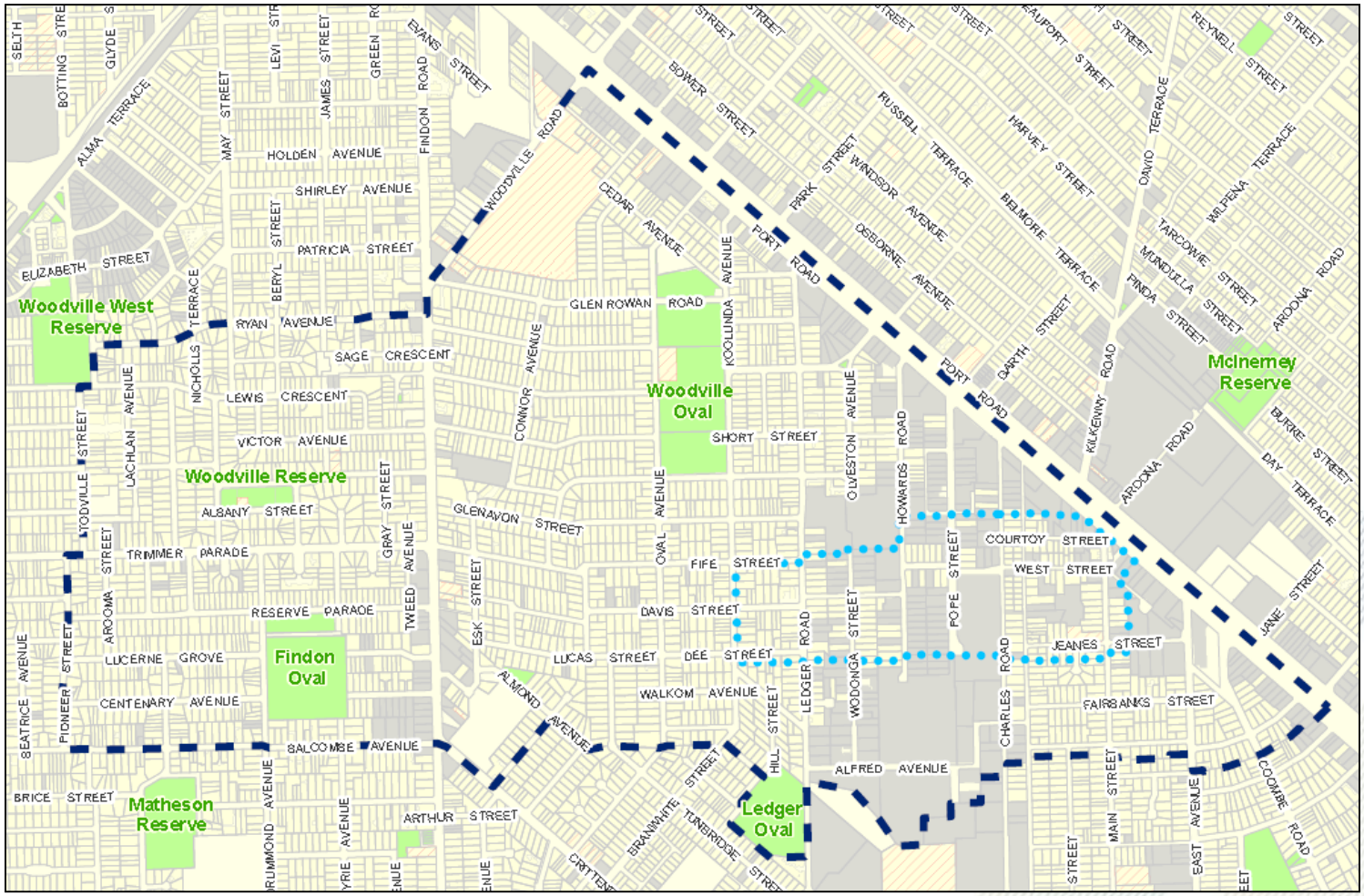
- **2007** – groundwater assessment undertaken by an industrial company identified the presence of Trichloroethene (TCE) in groundwater.
- **2007/2008** – SA Health and EPA conduct further groundwater assessment to determine nature and extent of contamination.
- **Early 2008** – SA Health and EPA advised residents not to use bore water until further notice.

Previous site owners have also undertaken their own assessment works within the industrial area since 2008.

Groundwater results 2007/2008



Recommended no groundwater use area

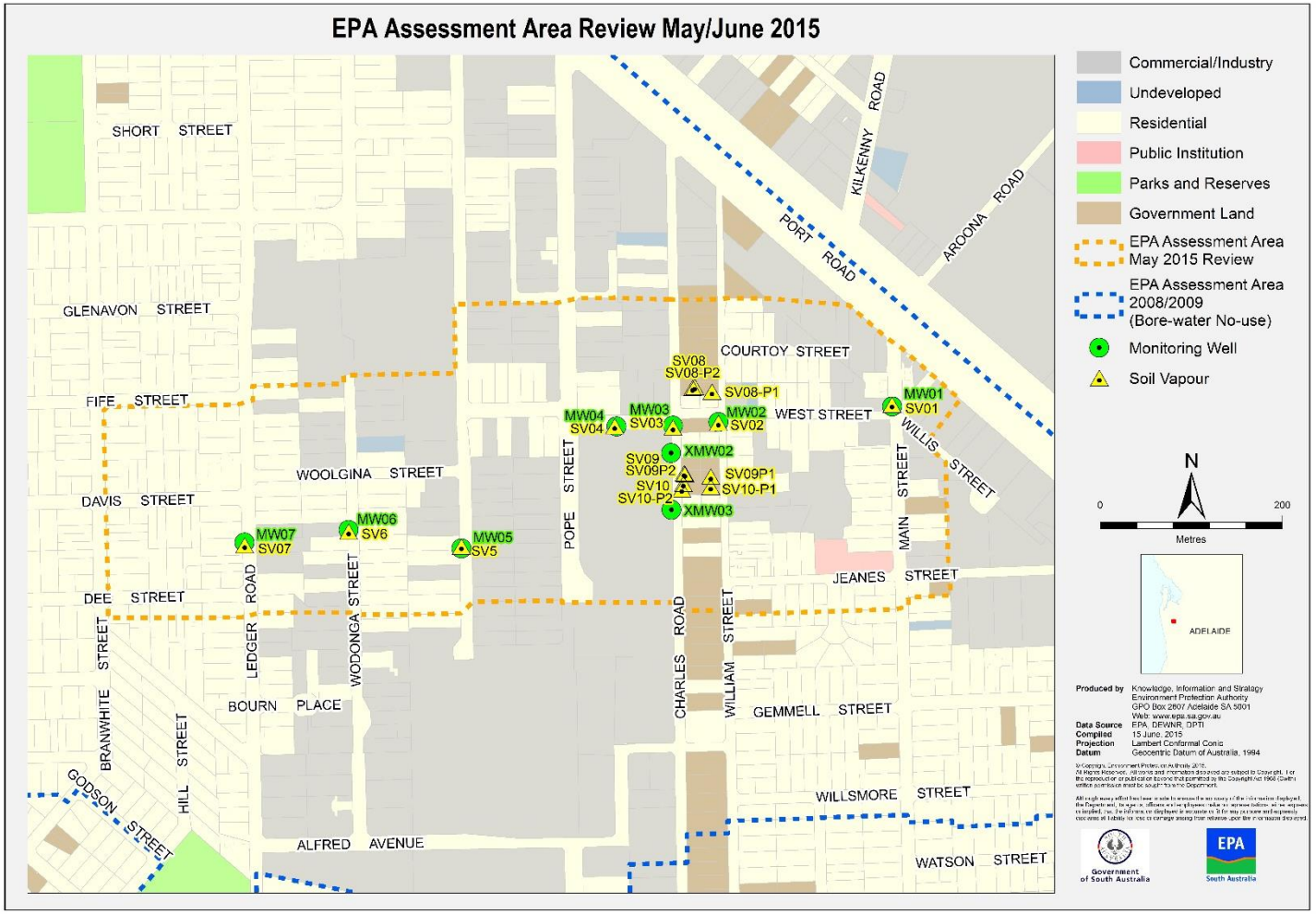


Current EPA assessment

- **July 2014** – EPA commenced a review of historical information for the site with the intention to establish a Groundwater Prohibition Area (GPA).
- **September 2014** – EPA and SA Health establish the need for further assessment works around the Beverley site to assess any potential risks to human health relating to vapour intrusion
- **October 2014** – residents advised of further assessment works to be undertaken.
- **April 2015** – assessment works commenced.
- **June 2015** – additional soil vapour assessment works commissioned to support the April assessment data (received late May 2015).

6. Current assessment program

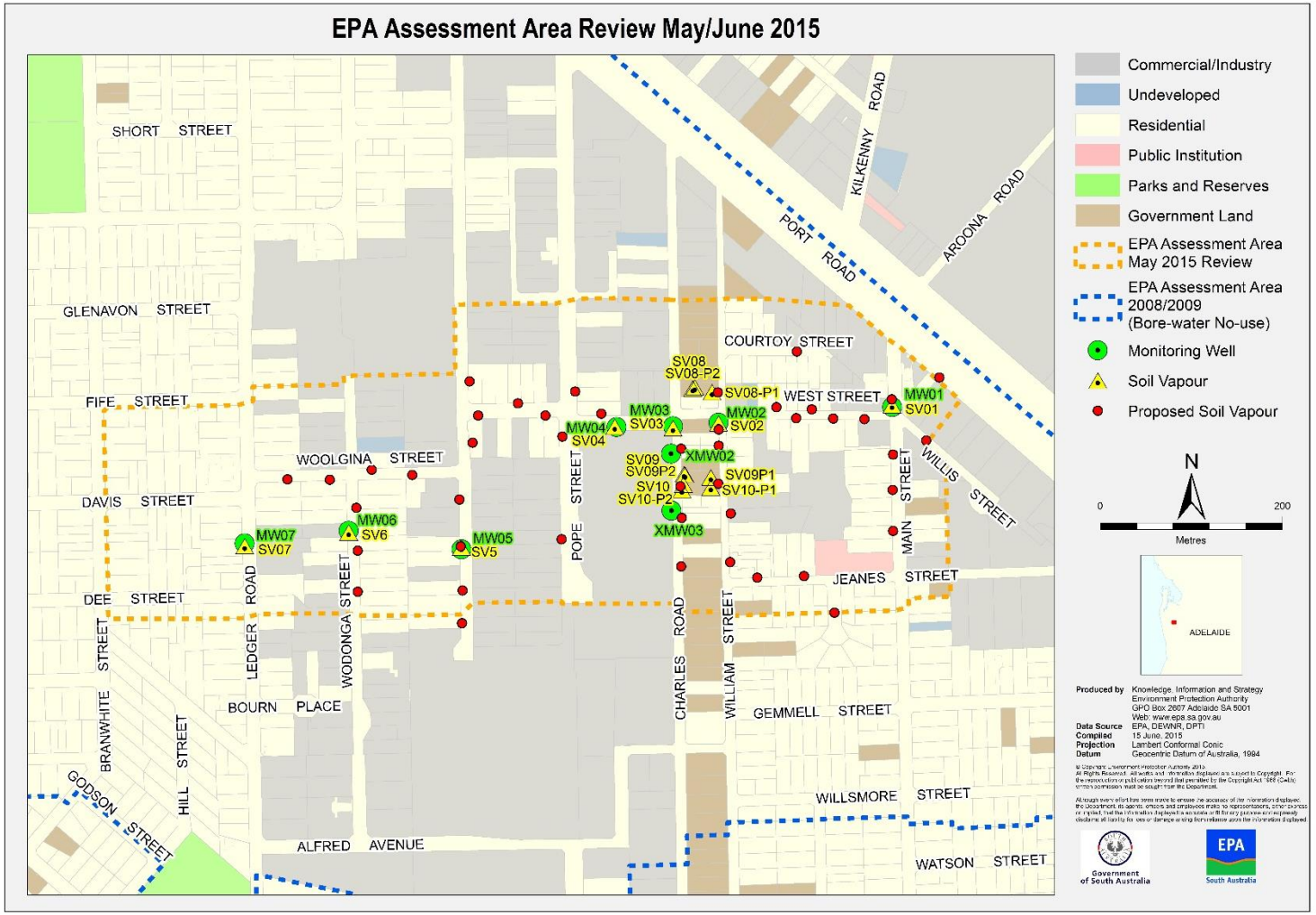
First stage of works



First stage of works

- Scope of work program:
  - 7 groundwater wells, approximately 8 and 10 metres deep
  - Up to 20 soil vapour bores, between 1 and 4 metres deep
- Involves two stages of assessment:
  - Stage 1 – raw data produced through the laboratory analysis
  - Stage 2 – full report and human health risk assessment
- Stage 1 data reported to EPA, indicates lower level of groundwater contamination and presence of soil vapour
- Further data required for Stage 2 to enable complete assessment of human health risk

Second stage of works



Second stage of works

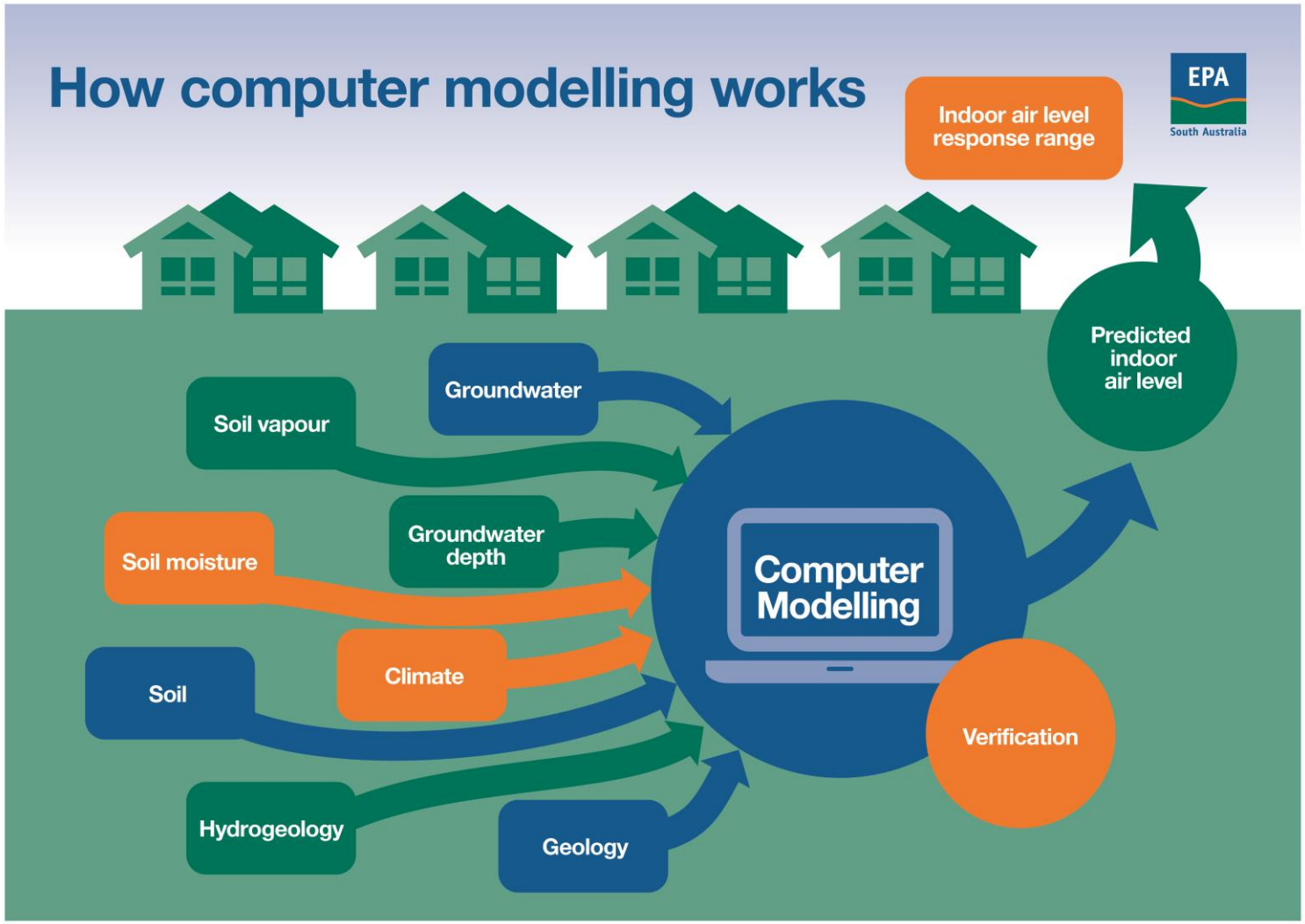
- Scope of work program:
  - 46 new shallow soil vapour bores at a depth of 1 metre.
  - Sampling of the new vapour bores and re-sampling of the initial soil vapour bores
  - Soil vapour samples are being collected from the crawl space and the soil beneath three DPTI owned properties on William Street, Beverley
  - Air flow monitoring is also being undertaken
  - Data collected from the properties will better inform the Stage 2 reports.

7. Results and next steps

Results and next steps

- Results of assessment program expected late July 2015
  - Vapour intrusion risk assessment
  - Human health risk assessment
- Computer modelling will be used to help assess and understand the risk of vapour intrusion
  - Uses multiple lines of evidence
  - Site specific
- Further assessment works likely to follow these results

Computer modelling



How we respond

Indoor Air Level: Nothing detected	**Indoor Air Level:** Above detection – less than 2 µg/m^3	**Indoor Air Level:** 2 - <20 µg/m^3	**Indoor Air Level:** 20 - <200 µg/m^3	**Indoor Air Level:** 200+ µg/m^3
				
Safe No further action	**Safe** Validate results Monitoring and evaluation	**No immediate health concerns** Further assessment may be necessary	**There may be a health risk** Immediately look at next steps and further assessment	**There is a health risk** Immediate action (mitigation or possible relocation)

8. Question and answer

9. Community engagement

Community engagement to date

- Thurs 28 May – residents within assessment area notified of second stage of works
- Fri 29 May – door knocked all residents within second stage assessment works area
- Fri 29 May – Letterbox to 2,800 homes within wider assessment area prior to commencement of works
- Sat 30 May – Attended Michael Atkinson MP street corner meetings
- Mon 1 June – follow up door knock with remaining residents
- Mon 1 June – briefed City of Charles Sturt elected members
- Tues 16 June – first Community Working Group meeting held

Planned engagement

- Community Working Group – ongoing engagement for the area
- Ongoing communication with City of Charles Sturt
- Communications when assessment results available including:
  - Personal visits
  - Letters to assessment area and broader area
  - Fact sheet summarising results

- Community information line staffed 24/7
  - Hotline: 1800 729 175
  - Email: EPASiteContam@epa.sa.gov.au

10. Next meeting and actions