

South Australia's Environment Protection Authority

Beverley and surrounding suburbs: *Community Working Group*

Tuesday 19 January 2016



Welcome

- Introduce EPA staff to the community
- Community Working Group arrangements for 2016

2015 assessment program

Between April and August 2015:

- Groundwater sampling at 12 locations
- Soil vapour sampling at various depths at over 80 locations
- Soil vapour sampling below the home or in the yard of 15 privately owned residential and commercial properties
- Indoor air testing inside 6 homes (two in October)

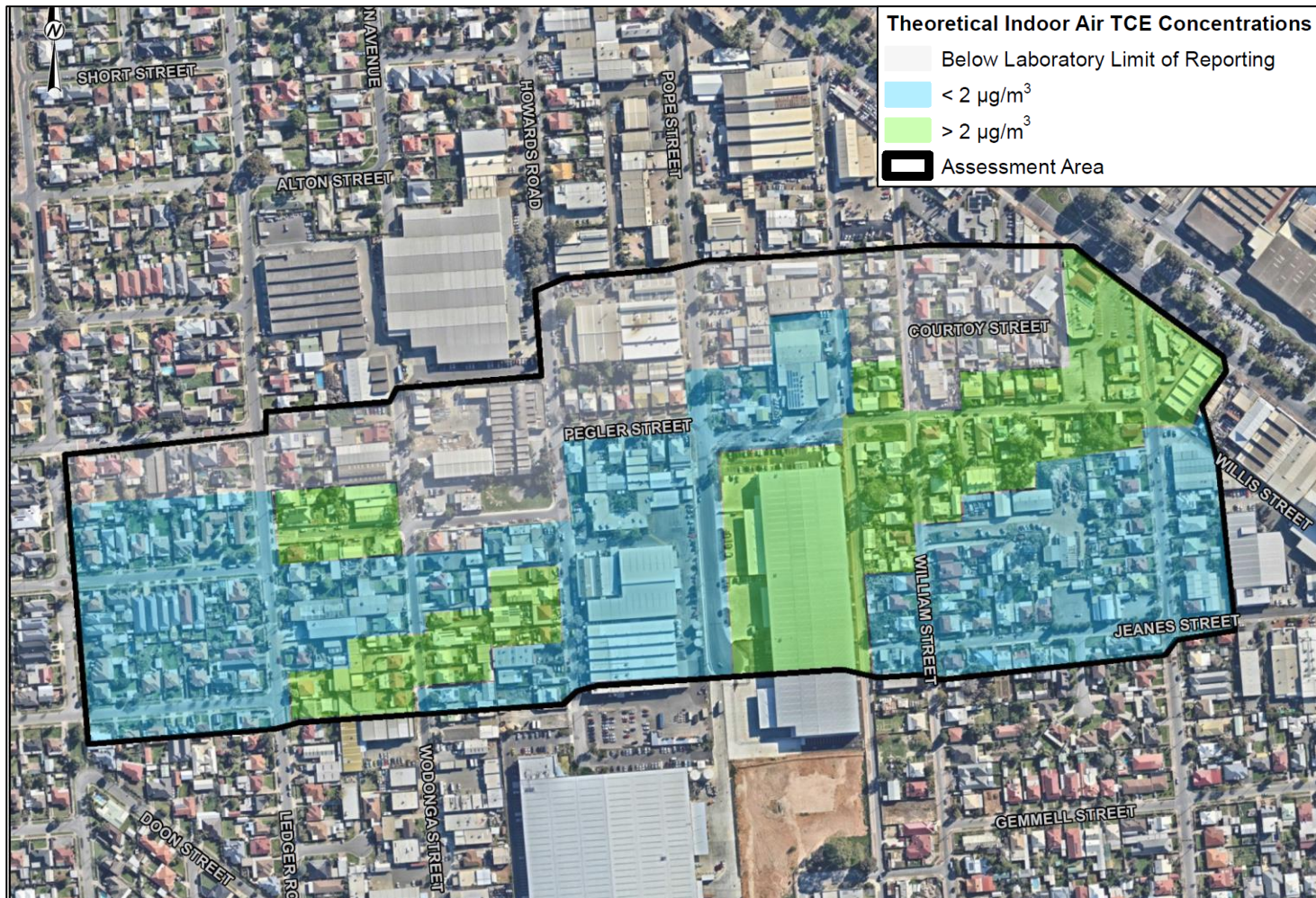
2015 assessment program

- The assessment program was managed by the EPA as a responsible party has not yet been identified
- All work was undertaken by site contamination consultants, Golder Associates
- Findings reported in September and October 2015

Main findings - general

- Trichloroethene (TCE) has been identified in groundwater and soil vapour across much of the assessment area, including at some boundary locations
- TCE vapour has been detected in the crawl space and indoor air of a number of properties
- The majority of the soil vapour contamination has come from the groundwater
- EPA understands that there are likely to be multiple sources of contamination from various historical industrial activities

Main findings – property specific



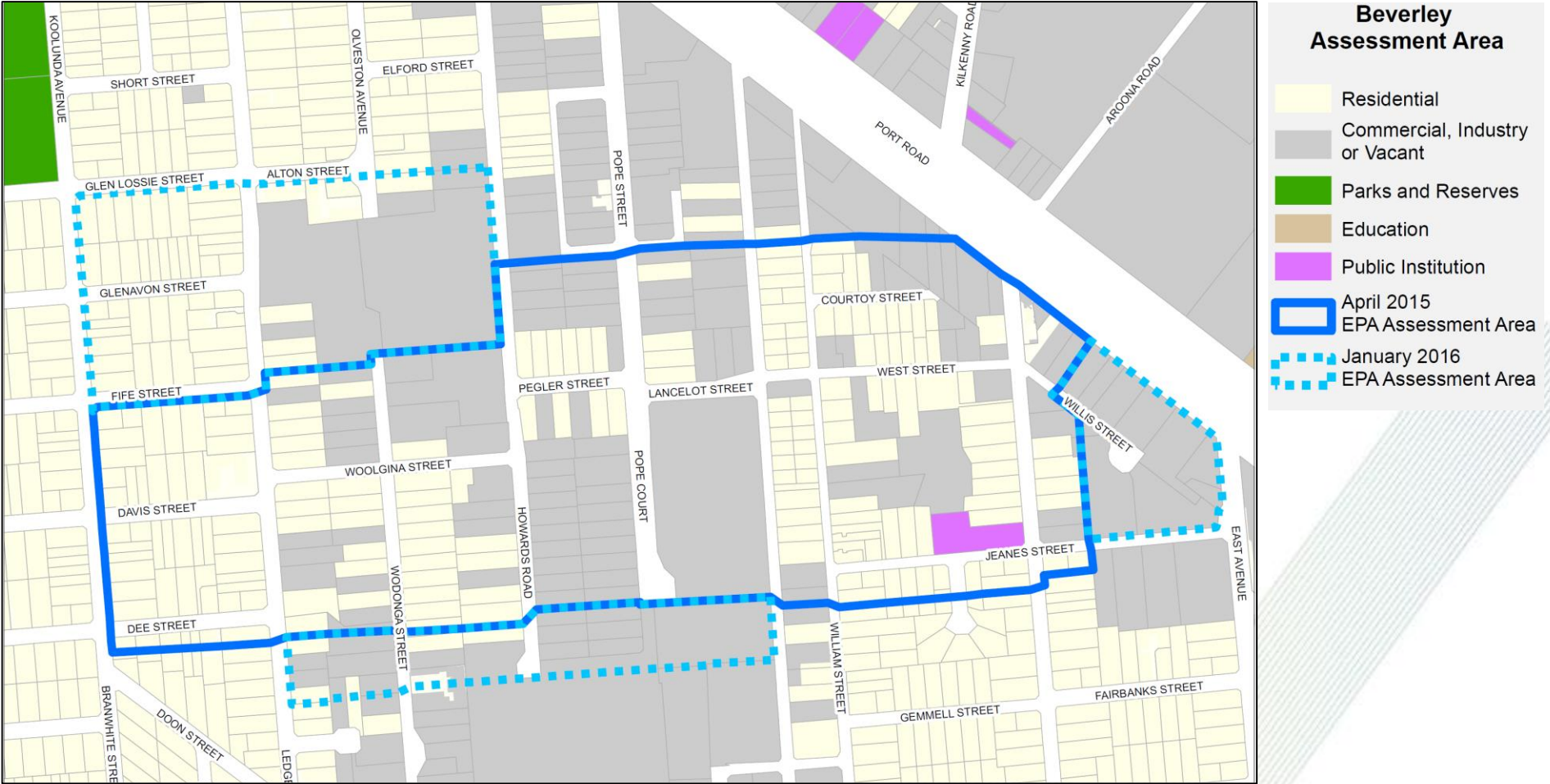
Main findings – property specific

Of the estimated 176 properties in the assessment area:

- 78 fell in the “non-detect” predicted indoor air range and require no further action.
- 53 fell in the “less than $2\mu\text{g}/\text{m}^3$ ” predicted indoor air range and require validation.
- Up to 45 sit in the “above $2\mu\text{g}/\text{m}^3$ ” range and require property specific assessment to better understand any potential risk.

These computer model predictions have been made based on data collected in the vicinity of the properties to understand where to target further assessment work

January 2016 assessment area



January 2016 assessment - objectives

Broader area work:

- Determine extent of contamination
- Investigate possible source locations

Validation work:

- To validate previous results (inc. Health Risk Assessment)
- To determine health risk and mitigation measures (if required)

Independent review by qualified toxicologist and risk assessor

- Dr Sim Ooi – Toxicologist of 26 years with over 15 years experience in preparing Human Health Risk Assessments

January 2016 assessment - scope

Broader area work:

- Public land (roads and road verges) and industrial land
- 11 new “nested” soil vapour bores at 2m and 4m
- 6 new groundwater wells
- Re-sampling of all existing soil vapour and groundwater wells

Validation work:

- Property specific (based on 2015 results)
- Soil vapour sampling in yards, beneath the home and indoor air

January 2016 assessment - timing

Broader area work:

- Commencing later this week for up to six weeks
- Site contamination consultant JBS&G to deliver works
- Results expected June 2016

Validation work:

- Commence early February following owner consent
- Site contamination consultant Golder Associates to deliver works
- Results expected June 2016

January 2016 assessment - results

In June 2016 the following will be produced:

- Factual report including fate and transport modelling
- Preliminary Human Health Risk Assessment
- Vapour Intrusion Risk Assessment

Results communications:

- Individual meetings and summary letters for residents included in the validation works
- Report summary distributed to assessment area
- All reports published on EPA website

Questions



Next meeting

Propose Tuesday 23 February 2016

- Assessment program update
- Meet Dr Sim Ooi – feature presentation

Thank you

