

South Australia's Environment Protection Authority

Southeastern Edwardstown Community Working Group



Tuesday 10 May 2016



Welcome and introductions

Rachel Hudson

Principal Adviser, Community Engagement

Agenda

1. Welcome and introductions
2. Review of last meeting notes
3. Design and scope of new works
4. How to improve air quality in your home
5. Questions
6. Next meeting proposed for Tuesday 12 July 2016

2. Review of past meeting notes

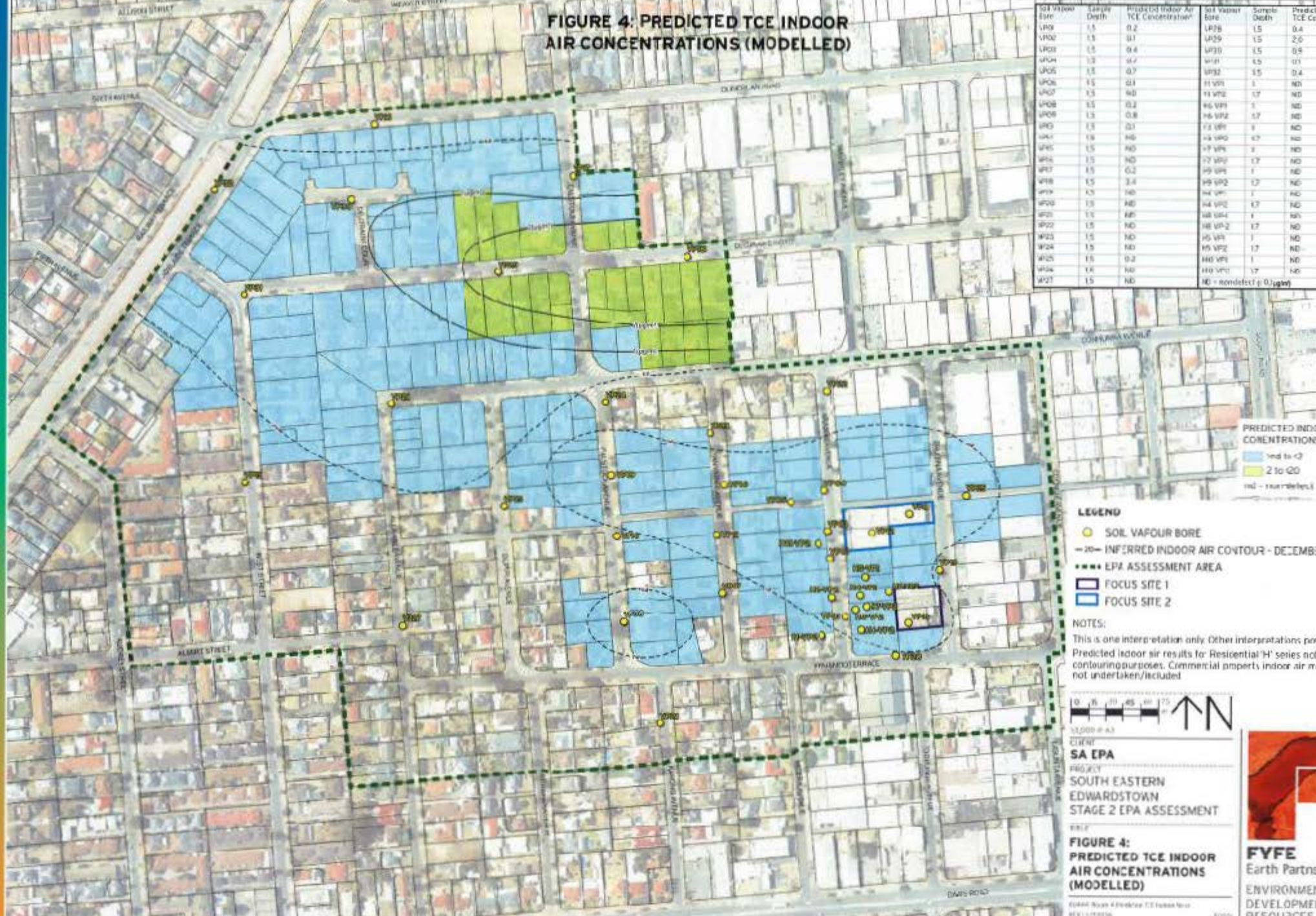
The environmental assessment program determined whether vapour intrusion was likely to be occurring at properties within the assessment area.

The highest predicted indoor air level was reported as **3.4 $\mu\text{g}/\text{m}^3$** (micrograms of TCE per cubic metre of indoor air). This falls at the lower end of the 'Investigation' response range.

FIGURE 4: PREDICTED TCE INDOOR AIR CONCENTRATIONS (MODELLED)

Soil Vapour Bore	Sample Depth	Predicted Indoor Air TCE Concentration*	Soil Vapour Bore	Sample Depth	Predicted TCE Concentration*
VP01	1.5	0.2	VP18	1.5	0.4
VP02	1.5	0.1	VP19	1.5	2.6
VP03	1.5	0.4	VP20	1.5	0.8
VP04	1.5	0.7	VP21	1.5	0.1
VP05	1.5	0.7	VP22	1.5	0.4
VP06	1.5	0.1	VP23	1	ND
VP07	1.5	ND	VP24	1.7	ND
VP08	1.5	0.2	VP25	1	ND
VP09	1.5	0.8	VP26	1.7	ND
VP10	1.5	0.1	VP27	1	ND
VP11	1.6	ND	VP28	1.9	ND
VP12	1.5	ND	VP29	1	ND
VP13	1.5	0.2	VP30	1.7	ND
VP14	1.5	3.4	VP31	1.7	ND
VP15	1.5	ND	VP32	1	ND
VP16	1.5	ND	VP33	1.7	ND
VP17	1.5	0.2	VP34	1	ND
VP18	1.5	ND	VP35	1.7	ND
VP19	1.5	ND	VP36	1	ND
VP20	1.5	ND	VP37	1.7	ND
VP21	1.5	ND	VP38	1	ND
VP22	1.5	ND	VP39	1.7	ND
VP23	1.5	ND	VP40	1	ND
VP24	1.5	ND	VP41	1.7	ND
VP25	1.5	0.2	VP42	1	ND
VP26	1.6	ND	VP43	1.7	ND
VP27	1.5	ND	VP44	1.7	ND

ND = nondetect < 0.1µg/m³



PREDICTED INDOOR CONCENTRATIONS
 - Ind to <2
 - 2 to <20
 nd - nondetect

- LEGEND**
- SOIL VAPOUR BORE
 - - - INFERRED INDOOR AIR CONTOUR - DECEMBER
 - EPA ASSESSMENT AREA
 - FOCUS SITE 1
 - FOCUS SITE 2

NOTES:
 This is one interpretation only. Other interpretations possible.
 Predicted indoor air results for Residential 'H' series not for contouring purposes. Commercial property indoor air not undertaken/included.

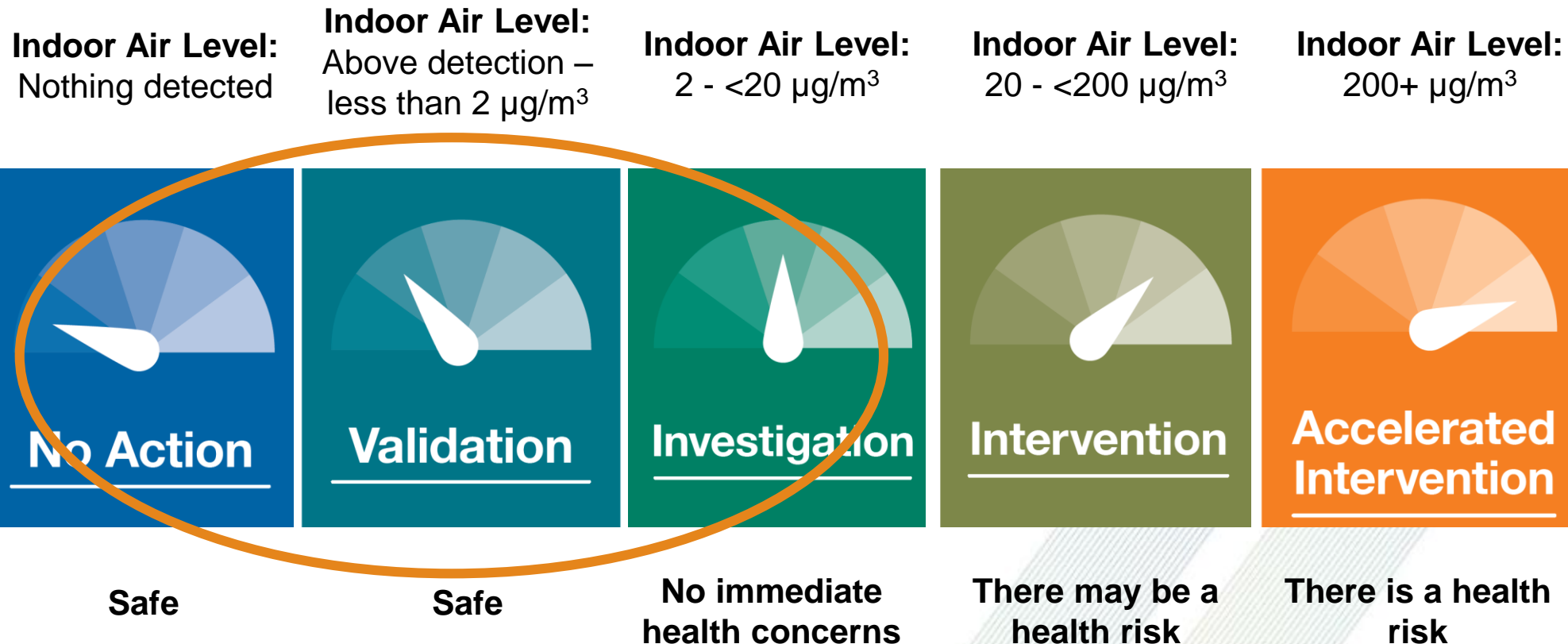


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 EDWARDSTOWN
 STAGE 2 EPA ASSESSMENT

FIGURE 4: PREDICTED TCE INDOOR AIR CONCENTRATIONS (MODELLED)



TCE indoor air level response range



2. Review of past meeting notes

The report found that soil vapour contamination is likely to be coming from contaminated groundwater.

The soil vapour results identified another potential source area, located to the north-east of the EPA assessment area at the Railway Tce/Adelaide Tce boundary.

The full nature and extent of the groundwater plume and soil vapour contamination was not able to be delineated by the results from the last round of assessments.

FIGURE 3: SOIL VAPOUR TCE CONCENTRATION PLAN

Soil Vapour Bore#	TCE Concentration (ug/L)	PCE Concentration (ug/L)	Soil Vapour Bore#	TCE Concentration (ug/L)	PCE Concentration (ug/L)
VP01	98	33	VP01	3.3	50
VP02	204	300	VP02	33	42
VP03	1,100	286	VP03	42	38
VP04	450	110	VP04	61	25
VP05	59	33	VP05	590	40
VP05 (D)	463	100	VP05 (D)	425	125
VP06	238	520	VP06	6.5	15.5
VP07	43	30	VP07	9.8	15.4
VP07 (D)	1100	1000	VP08	1,000	180
VP08	640	610	VP09	5,770	2,580
VP09	1,190	180	VP10	2,770	910
VP10 (D)	4,000	1540	VP11	481	280
VP10 (D) (S)	248,000	89	VP12	1,000	290
VP11 (D)	6,300,000	1,460,000	VP12 (D)	12	10
VP11 (D) (S)	36,900,000	3,800,000	VP13 (D)	12	10
VP12 (D)	640,000	30,400	VP14 (D)	9.8	28
VP13	334	48	VP15 (D)	8.4	15.4
VP14	42	23	VP16 (D)	18	15.4
VP15	5	15	VP17 (D)	29	40
VP16	13	14.8	VP18 (D)	36	34
VP17	450	400	VP19 (D)	12	18
VP18	9,800	4,790	VP20 (D)	12	29
VP19	23	26			
VP20	4	160			

SOIL VAPOUR TCE CONCENTRATIONS (ug/L)

Light Blue	nd to <200
Medium Blue	200 to <2k
Dark Blue	2k to <20k
Green	20k to <200k
Yellow	200k to <2,000k
Red	2,000k + above
White	nd = non-detect

LEGEND

- SOIL VAPOUR BORE
- INFERRED SOIL VAPOUR CONTOUR - DECEMBER 2015
- EPA ASSESSMENT AREA
- FOCUS AREA 1
- FOCUS AREA 2

NOTES:

This is one interpretation only. Other interpretations possible
 Where duplicate samples exist, highest recorded concentration used for contouring
 Residential soil vapour H' series sample results not used for contouring purposes

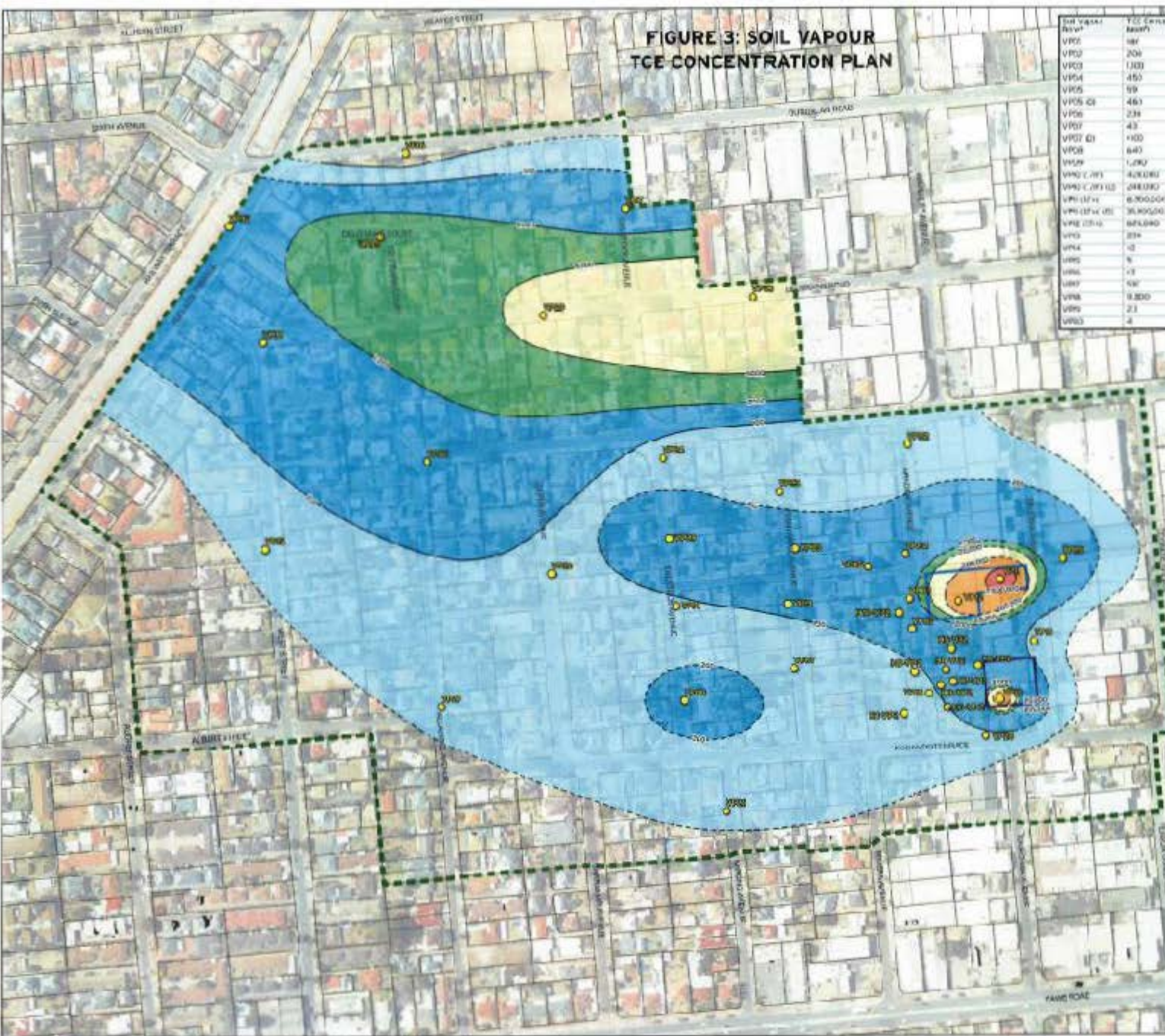


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FIGURE 3: SOIL VAPOUR TCE CONCENTRATION PLAN



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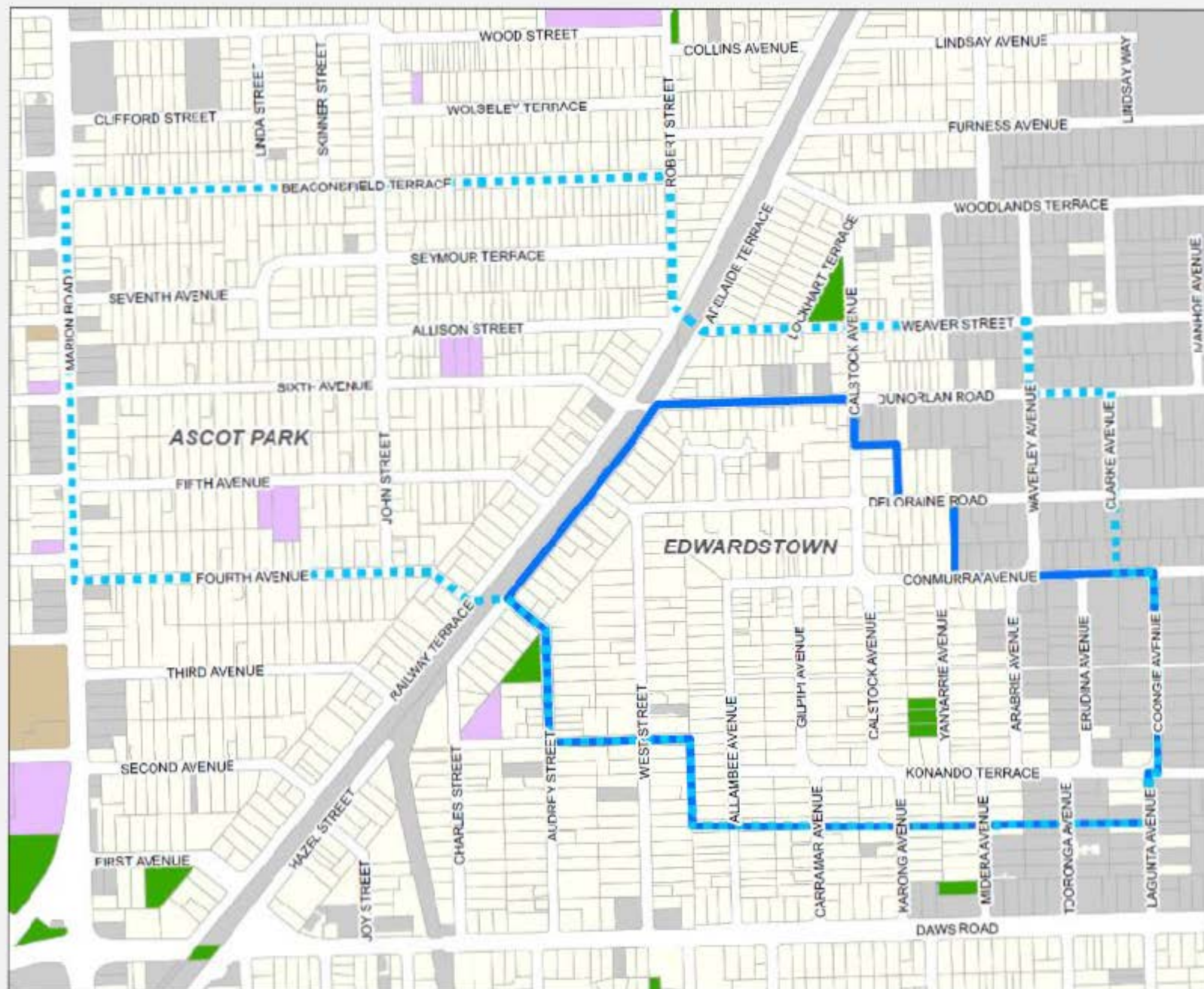


3. Design and scope of new works

Dale McGill

A/Principal Adviser, Site Contamination

**Figure 1:
South-Eastern
Edwardstown
Assessment Area**



- Residential
- Commercial, industry or Vacant
- Education
- Public institution
- Parks and Reserves
- Existing EPA Assessment Area
- EPA Assessment Area April 2016



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3. Design and scope of new works

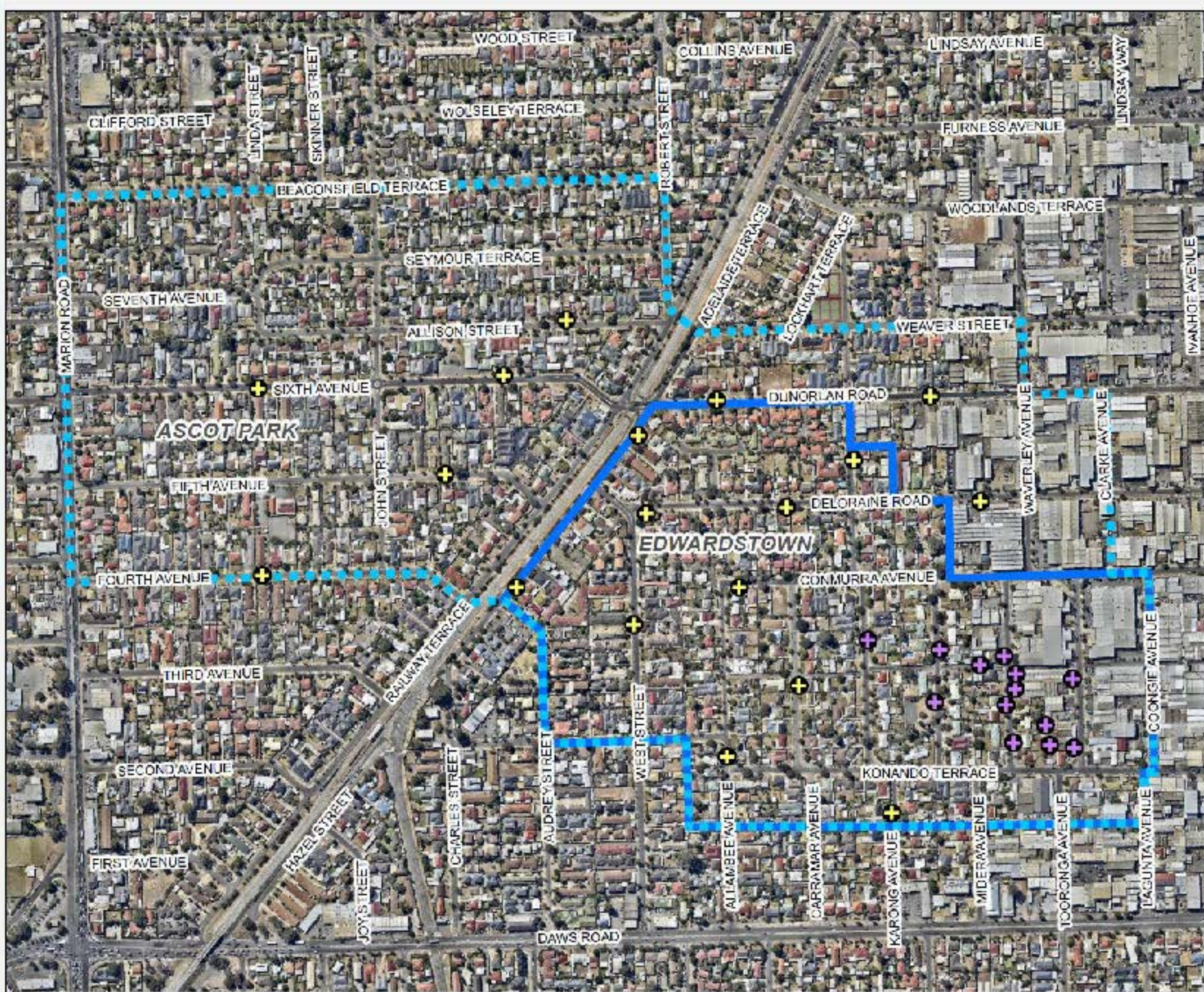
Twenty groundwater bores and twenty soil vapour testing bores are in the process of being installed in Edwardstown and Ascot Park.

Bores are being installed in the west of the assessment area across train line, and in the north east to more accurately define the potential source of contamination.



**Figure 2:
South-Eastern
Edwardstown
Assessment Area**

-  Existing EPA Assessment Area
-  EPA Assessment Area April 2016
-  Existing Groundwater Well
-  Proposed Groundwater Well



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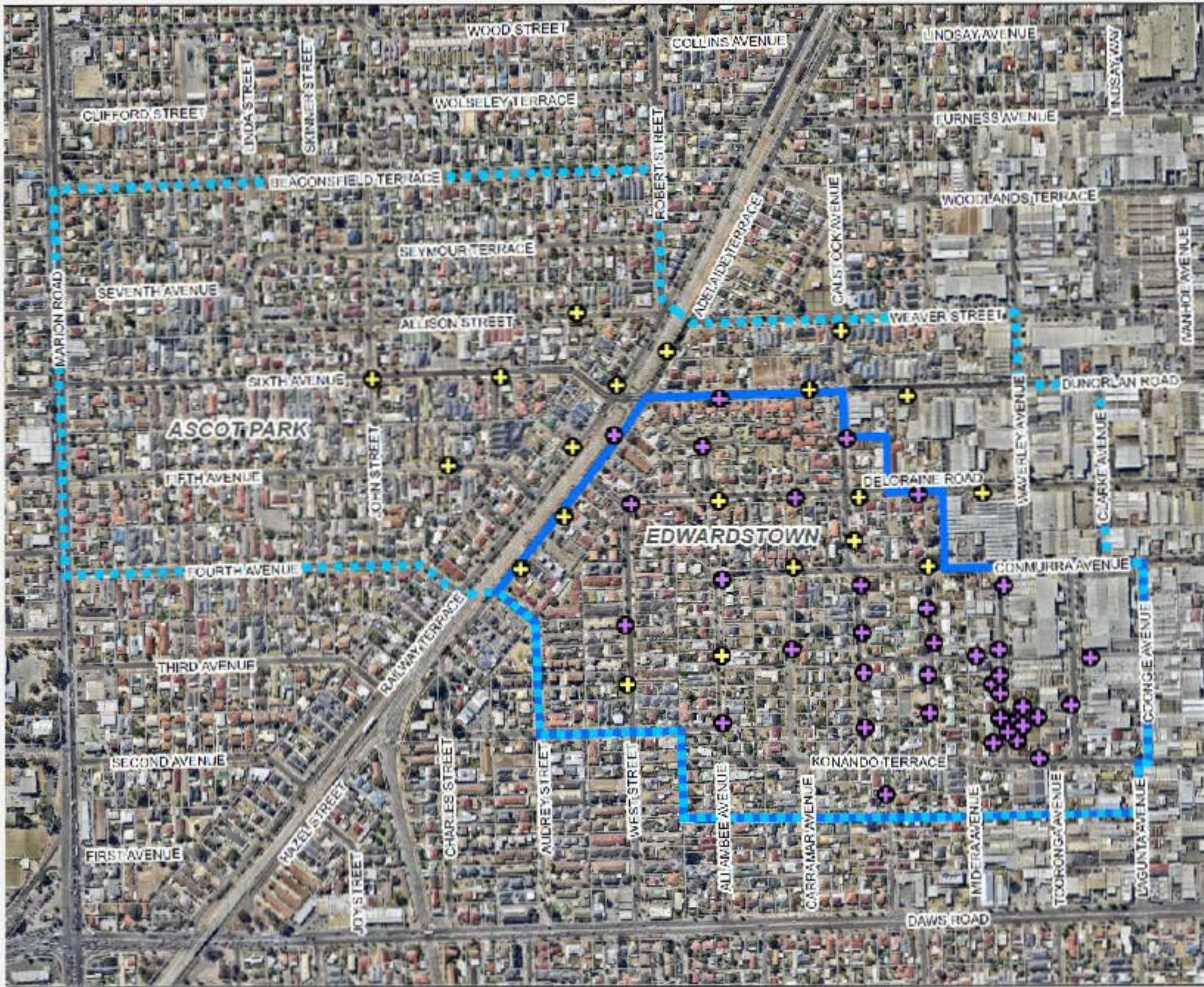
Data Source: EPA, DEWIR
 21/04/2016 2:14:00 PM
 23 March 2016





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**Figure 3:
South-Eastern
Edwardstown
Assessment Area**



-  Existing EPA Assessment Area
-  EPA Assessment Area April 2016
-  Existing Soil Vapour Bore
-  Proposed Soil Vapour Bore



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3. Design and scope of new works



Soil samples collected from drilling

Bore installation is commencing this week and continuing through until late May 2016.

The next report, including data, an updated conceptual site model and revised risk assessment is expected in late June 2016.

4. SA Health

Dr Ian Delaere

Manager – Toxicology

5. Questions

What do the TCE predictions mean for pregnant women both working or living in South Eastern Edwardstown (at the locations where the predictions are highest?).

Any other questions?

Thank you and next meeting

Next meeting is proposed for Tuesday 12 July 2016, after the report has been submitted and reviewed by the EPA.