South Australia's Environment Protection Authority

South-eastern Edwardstown
Community Working Group

Tuesday 15 December 2015

1. Welcome and introductions

Agenda

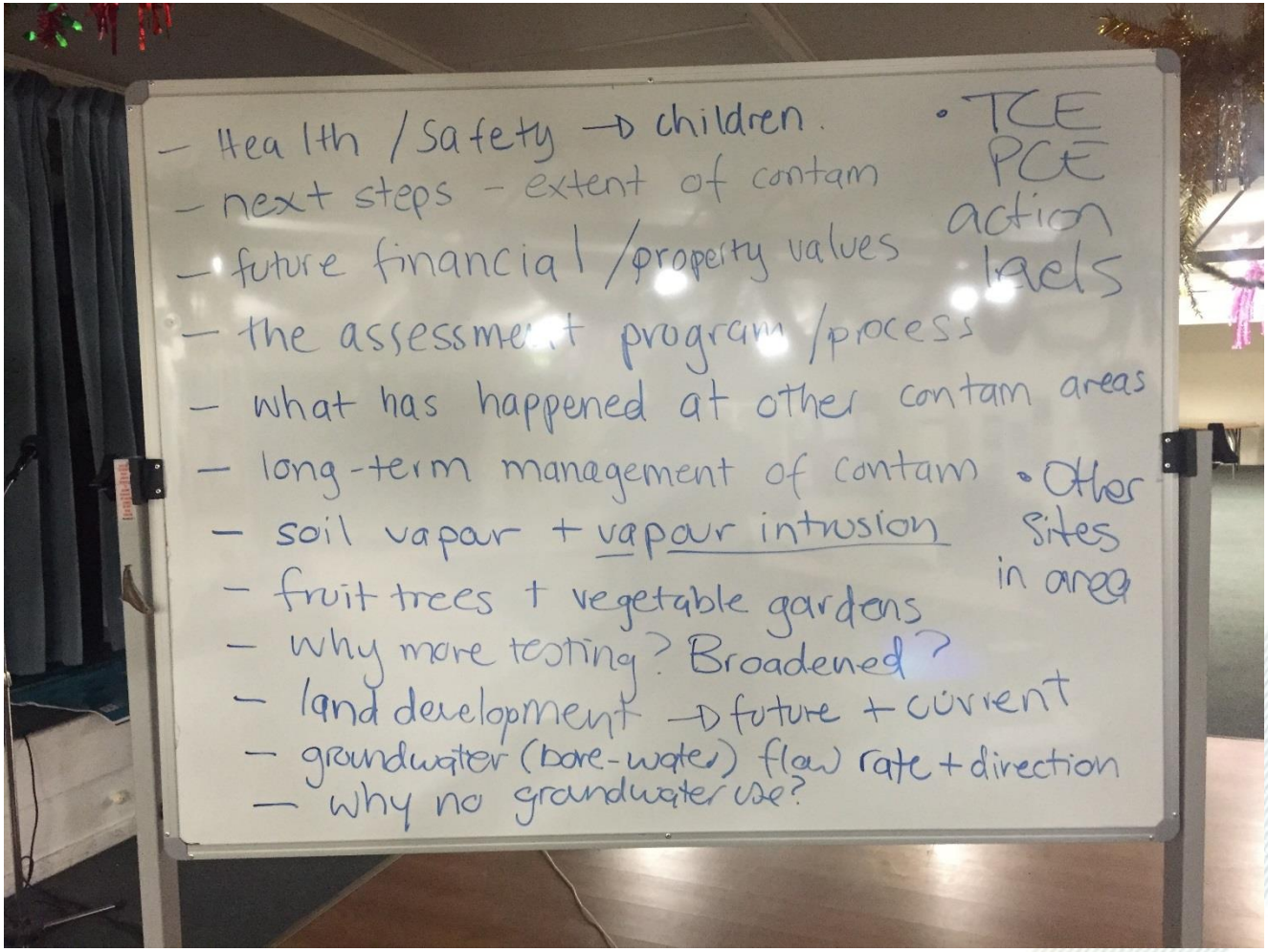
1. Welcome and introductions
2. Notes from last meeting
3. Terms of Reference
4. Assessment program update
5. TCE and health
6. How we respond
7. Community engagement and communication update
8. Next meeting and actions

2. Notes from last meeting

Review meeting notes

- Recap of discussion at last meeting
- Any comments?
- Acceptance of meeting notes for publishing on the EPA website along with the presentation

Review meeting notes



3. Terms of reference

Terms of Reference

Confirmation and endorsement

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

4. Assessment program update

Assessment area

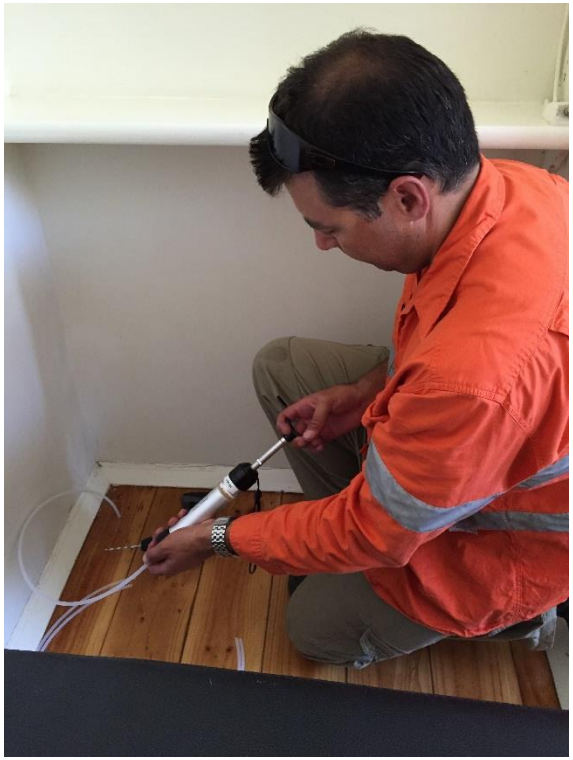
Assessment work to date

- Passive (temporary) soil vapour bores installed and sampling completed at 44 locations
- Permanent soil vapour bores installed at 20 locations
- Samples collected from 38 permanent soil vapour bores on public land (new and existing)

Assessment work - residential

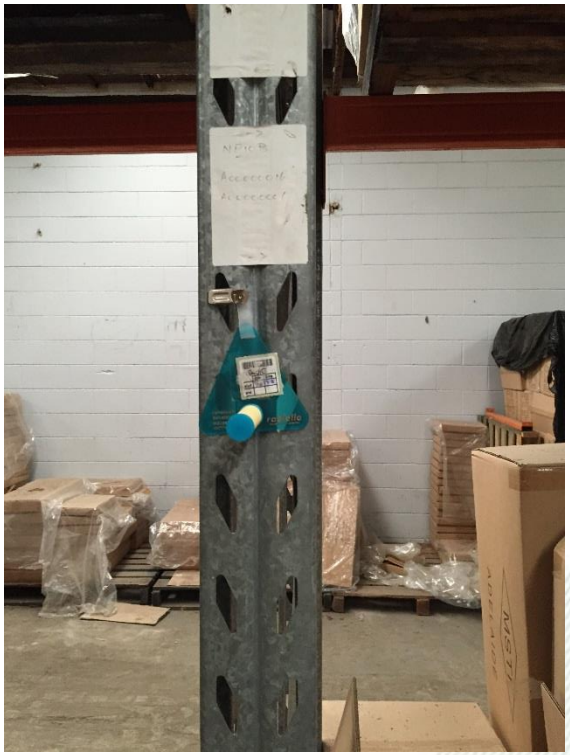
- Completed crawl space sampling at six residential properties
- Permanent soil vapour bores installed in the yards of six residential properties
- Samples collected from soil vapour bores on six residential properties
- Finalisation of crawl space sampling at six residential properties

Assessment work - residential



Assessment work - commercial

- Indoor air sampling completed at two industrial properties
- Re-sampling of existing soil vapour bores within the buildings



Assessment reporting

- All data collected from the area will be used to produce:
  - Final data report
  - Conceptual site model
  - Preliminary Vapour Intrusion Risk Assessment

- These reports are expected in March 2016

5. TCE and health

What do we know about TCE and health

- Limited data worldwide for residential environments

- Different types of exposure:
  - Occupational – 5 days per week 8 hours per working day
  - Residential – every day 24 hours a day for a life time (70 years)

- Exposure depends on:
  - How long a person may have been exposed
  - How much a person has been exposed to
  - How that person was exposed (air / water)

What do we know about TCE and health

- Human health effects depend on:
  - Human factors (age, lifestyle)
  - Environmental factors (geology, climate)
  - House factors (construction type)

- Exposure itself does not necessarily translate to health effects (many variables)

TCE in indoor air

- A major focus of the current investigation is the potential for TCE vapour to enter confined spaces
- TCE in indoor air is measured in micrograms per cubic metre of air ($\mu g/m^3$)
- SA Health and the EPA have adopted a TCE concentration of 2 $\mu g/m^3$ as the measure to determine whether further action is required
- Less than 2 $\mu g/m^3$ is considered safe
- Above 2 $\mu g/m^3$ is not necessarily unsafe, but warrants further investigation

TCE indoor air level response range

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	**Safe**	**No immediate health concerns**	**There may be a health risk**	**There is a health risk**

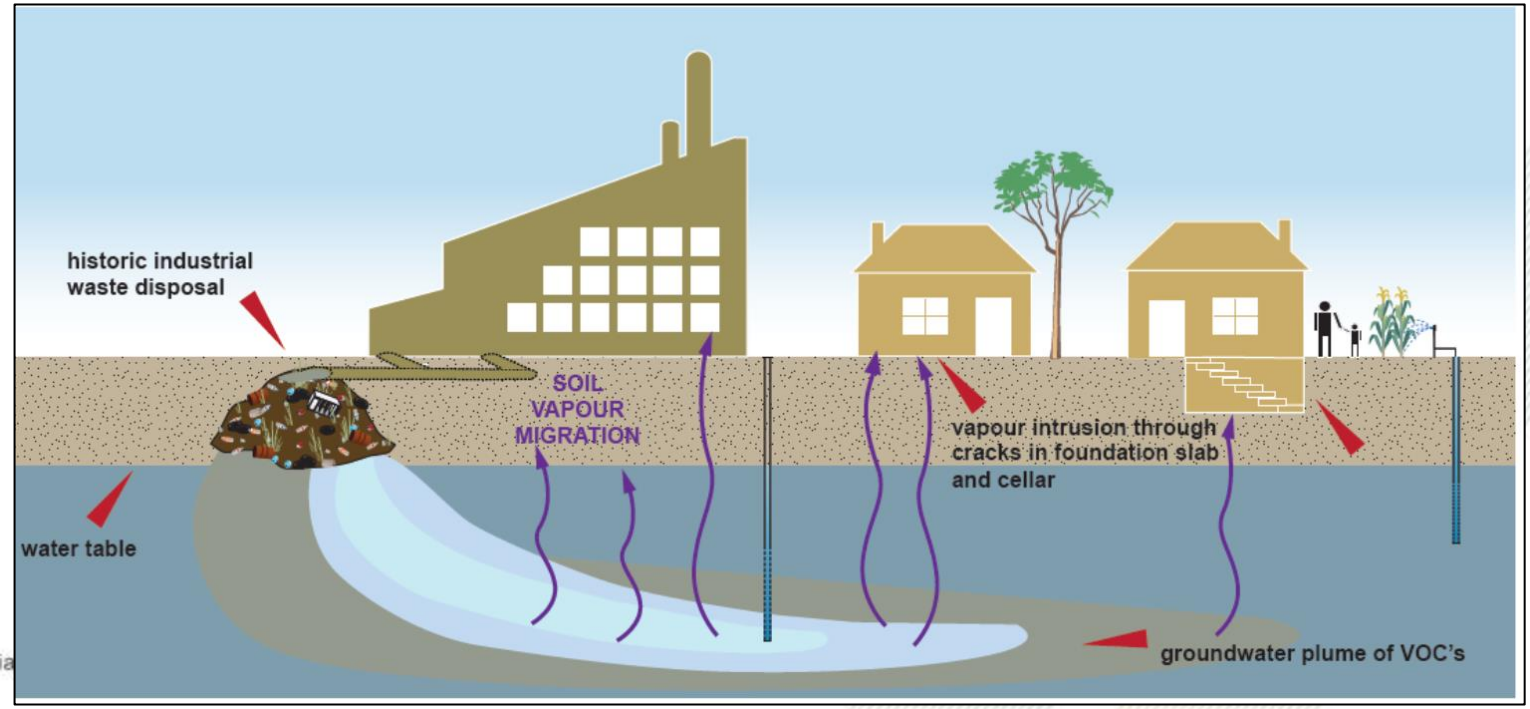
6. How we respond

How we respond

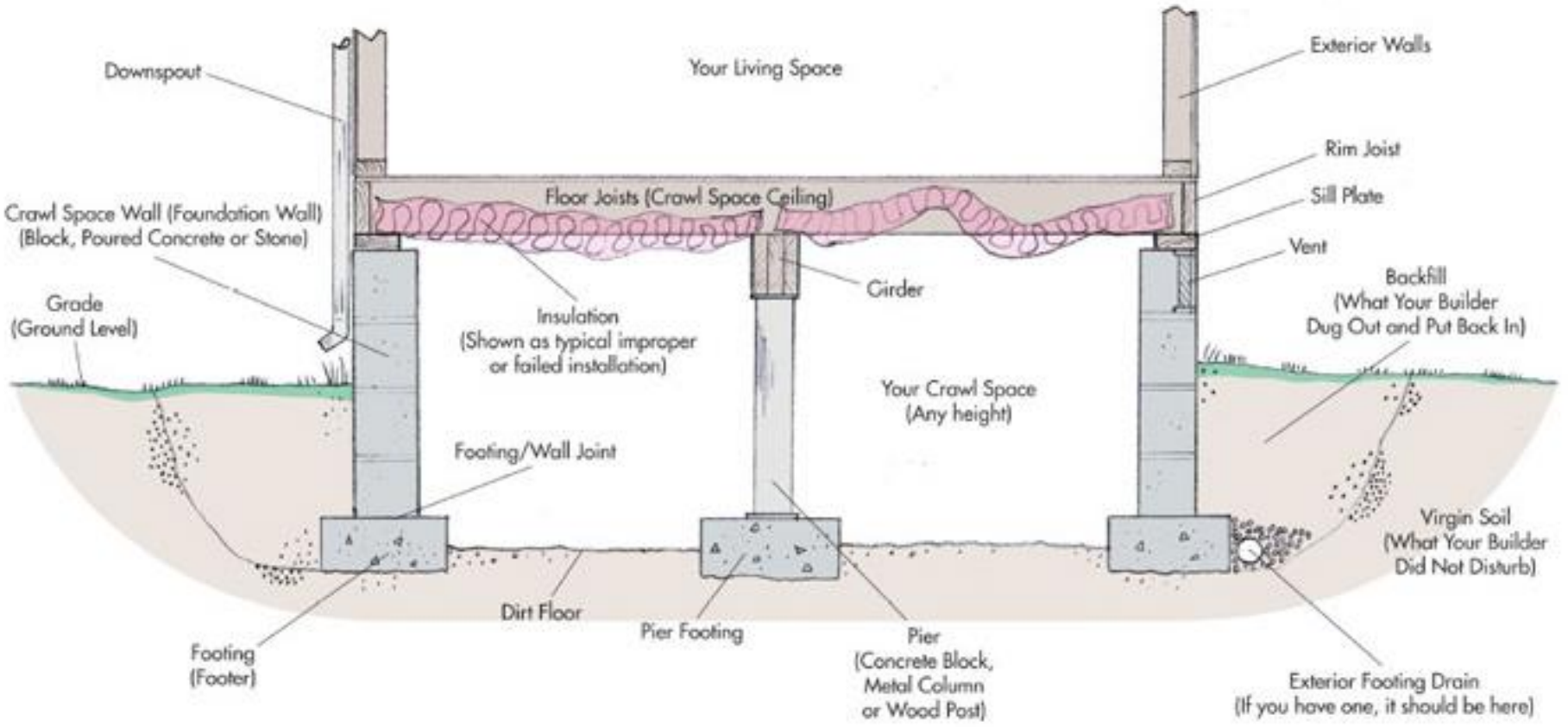
Indoor Air Level: Nothing detected	**Indoor Air Level:** Above detection – less than 2 µg/m^3	**Indoor Air Level:** 2 - <20 µg/m^3	**Indoor Air Level:** 20 - <200 µg/m^3	**Indoor Air Level:** 200+ µg/m^3
				
Safe	**Safe**	**No immediate health concerns**	**There may be a health risk**	**There is a health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

Remediation and mitigation

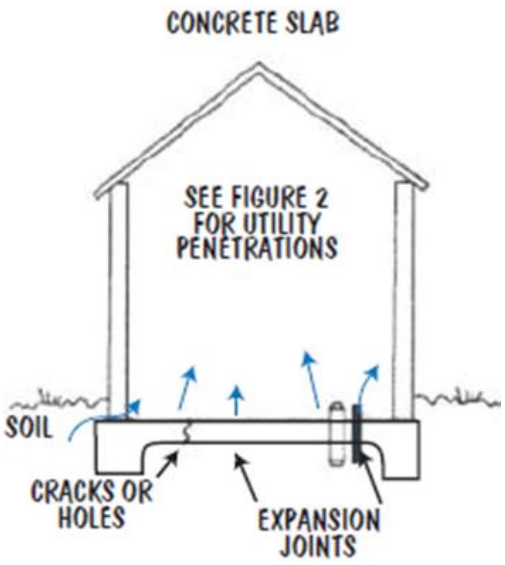
- **Remediation** – management of the contamination (e.g. removal of the source)
- **Mitigation** – management of the effects of the contamination (e.g. management of vapour)

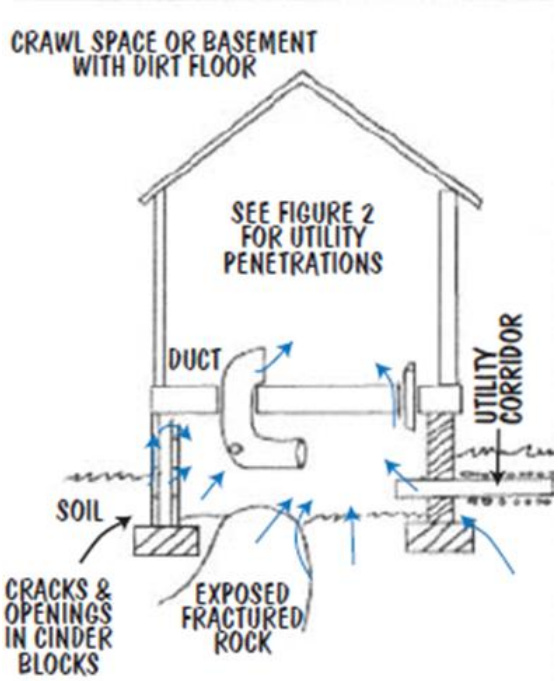


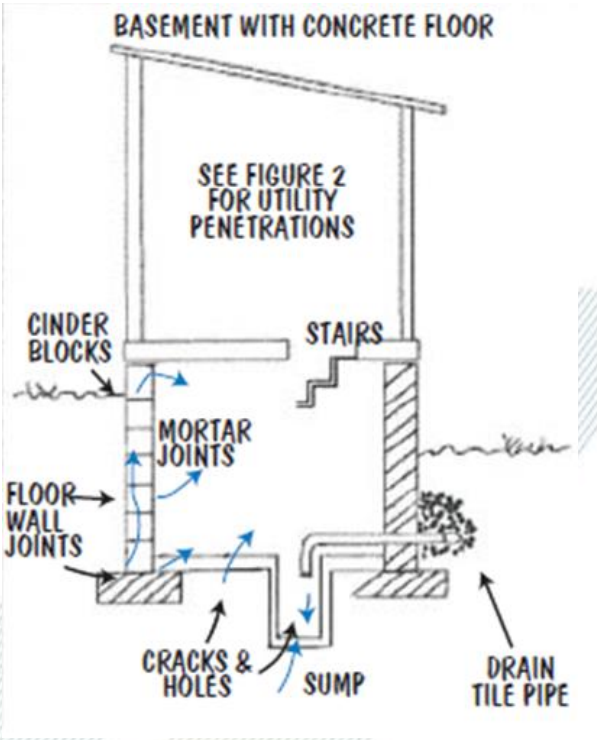
House type – crawl space



Seal the leaks







Sub-slab depressurisation

7. Community engagement

Community engagement to date

- Tuesday 24 November – Community Working Group meeting held
- Thursday 3 and Friday 4 December – personal visits with residents to determine locations for residential property testing
- Monday 7 December – EPA provided planning advice to City of Marion Council – all pending developments ok to proceed
- Tuesday 15 December – Community Working Group meeting held

- Weekly updates provide to City of Charles Sturt Council
- Regular updates provided to State and Federal electorate offices

Planned engagement

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

8. Next meeting and actions

Thank you