

EPA 05/17652

Dear Local Resident

Update on contamination in Edwardstown, South Plympton

I am writing to update you on the investigations into contamination at Edwardstown and South Plympton and to answer the most frequently asked questions.

First however, I acknowledge community concerns that have been expressed about the potential health impacts of the contamination. Please be assured that your health and safety are our priority.

I also apologise for the fact that many of you heard about this issue through the media before you received our letter to you.

Why didn't you tell us sooner?

Since the announcement last week, community concerns have been expressed about why we did not tell you about the contamination earlier. We have endeavoured to tell you what we know of the contamination when we had evidence that the health of residents was potentially affected.

The EPA first became aware that groundwater contamination was in areas in close proximity to registered domestic groundwater bores on 14 February 2011, (not 18 months ago as some media reports have claimed). As soon as the EPA became aware of this new monitoring data we urgently worked with health officials to assess the implications of that data.

Contamination on the former Hills Industries site itself on South Road was first reported to us in August 2009. Testing by consultants working on behalf of Hills Industries/Colonial First State began at the source site (the former Hills site) 18 months ago and methodically moved outwards from that source. The information from this testing has come to us progressively, as each phase of the testing has been completed.

Can I eat my fruit and vegetables?

If you have been watering your fruit and vegetables with bore water, the health advice is that you should not eat them until either you have had your bore tested and it is deemed fit for use, or the EPA confirms the extent of contaminated groundwater.

The Department of Health issues a standard advice that bore water should never be used for drinking, cooking, watering edible plants or filling up swimming pools, unless it has been tested by a specialist laboratory. Specific advice is available from SA Health Scientific Services.

What if the fruit tree roots are in the aquifer?

While mains water and rainwater tanks are not affected by groundwater contamination, caution is recommended with any fruit trees that may have roots that tap into the aquifer.

In your area the depth of groundwater varies from 2-4 metres. Botanic Garden staff have advised the EPA of the following average root depths of the fruit trees:

- cherry trees: root depth very shallow
- citrus trees: root depth 30-50 cm (the top metre)
- stone fruit trees: root depth 50 cm (the top metre)
- avocados: root depth similar to citrus
- mulberry/figs/pome (including pears and apples): root depth less than 2-3 metres but if a large tree the roots maybe deeper
- pecans/nuts: potentially extends below 4 metres.

This information is based on plants being grown in soil conditions found in the domestic and agricultural environs. If you are concerned about your fruit tree(s), please contact the EPA.

Why shouldn't I continue to use my bore water if I have a bore?

A number of residents have told us that they plan to continue to use their bore water, even though the EPA has advised not to use it until further notice.

There are two reasons we ask you not to use your bore water:

1. it could be contaminated
2. even if your bore is not contaminated, if you use your bore water you risk drawing the contaminated water further along the aquifer.

We need everyone in the area to stop using their bores so that the contaminated area can be fully identified and we can minimise the spread of the contamination.

Forbes Primary School bore test results

While the Forbes Primary School is some distance from the source and its bore is in a much deeper aquifer than where the contamination has been found, the EPA has helped the school to get its bore water tested as a precaution. The school has agreed not to use the water until the results of this testing have been received.

Bore water samples were taken on Tuesday last week and sent for analysis. We have received results for PCE (perchloroethene), TCE (trichloroethene) and DCE (dichloroethene) but are awaiting the result for vinyl chloride. So far, testing has found no PCE, TCE or DCE, however the school has advised that it will await the final results before resuming use of its bore. The reason for the delay on the result for vinyl chloride is that this analysis is only able to be undertaken by a specialist laboratory.

We are providing the school with the results as soon as they become available, and will update our website accordingly.

What happens next?

We are working closely with Hills Holdings/Colonial First State and their consultants to ensure that further investigations are undertaken to determine the full nature and extent of the contamination. We have given them a tight deadline to determine the boundaries of the groundwater contamination. To complete this work further testing bores will be drilled west of Laurence Street and south of Thomas Street in the next few weeks. Hills have engaged an independent auditor to oversee this work.

The chemicals found to be present in groundwater also have the potential to change from liquid to gas and move through the soil pore spaces to the ground surface. It is then possible for the chemicals in gas form to migrate further and build up in confined spaces such as cellars and houses. The risk posed by these chemicals in homes, if they are indeed present, would be through long term exposure.

To investigate if there are any potential risks from vapour intrusion, the EPA will test indoor air quality in approximately 25 selected houses in the area. If your house is selected, the EPA staff will contact you by letter next week to arrange a mutually suitable time to install the testing canisters and explain the testing in detail. Please note EPA staff will show you identification if they attend your house.

The results of both these investigations – both indoor air quality testing and further groundwater testing - will be made publicly as soon as it becomes available.

The next steps will depend upon the results from the indoor air quality monitoring, whether the chemicals are present and, if so, at what level and the level of human exposure to those chemicals.

Further frequently asked questions and answers are available on the EPA website at www.epa.sa.gov.au via the *What's New* list on the home page. As I stated earlier, you are most welcome to call the EPA hotline on 1800 729 175 for any other questions you might have.

Yours sincerely



Helen Fulcher

CHIEF EXECUTIVE

ENVIRONMENT PROTECTION AUTHORITY

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