



## SITE CONTAMINATION

# Pasadena landfill gas – FAQs

Issued 11 April 2019

### Where is the landfill gas that has been detected?

Landfill gas has been detected at Lot 101 Port Lincoln Boulevard, Pasadena. Historically, the site is known to have been used as a landfill from 1959 to 1962, with some historical putrescible waste creating landfill gas comprising methane and other minor gases. Landfilling with construction and demolition waste also occurred after this time.

### Is there a risk to residents?

The Environment Protection Authority (EPA) does not hold any information that indicates properties surrounding this site are not safe. It is undertaking precautionary testing at a small number of properties near the boundary where methane had been detected on the former landfill site itself.

Methane is only a risk to residents if it reaches levels where it may become a fire hazard (between 5–15% of indoor air). As a precaution, if methane is detected above 1% of indoor air (or 10,000 parts per million) in the small number of homes being tested, the EPA will assist residents to implement measures to quickly reduce methane back to safe levels.

### What about my health, if I breathe it in?

At low concentrations in the air methane does not affect your health. If present in high amounts, adverse odour impacts from some of the trace gases in landfill gas may be experienced, and its accumulation in confined spaces can become a potential fire hazard or asphyxiant.

These risks happen when landfill gas has migrated to confined spaces where people live and work, at sufficiently high concentrations (flammable between 5% and 15%), and in sufficient volumes.

The EPA does not hold any information that indicates landfill gas is at high enough concentrations to cause these effects in Pasadena, and is reviewing the information it currently holds as a precaution as well as testing specific sites.

### What can be done to remove the landfill gas?

Measures can be taken to remove methane from the source site to prevent it migrating off the site. Gas extraction wells can be installed at the source site which can vent the landfill gas passively

or with an active pumping system. Where necessary, landfill gas that has migrated to nearby residential properties can be removed by natural ventilation such as opening windows and doors. If there are large amounts of landfill gas then fans or ventilation systems can be used to reduce the amount of gas in indoor air.

## How long has the landfill gas been there and why is it a problem now?

Historic waste deposition and land-use planning was undertaken in the absence of modern knowledge about the existence and appropriate management of landfill gas. It is likely that landfill gas started to be generated a year or two after waste had been deposited (1959–62) and would have reduced over the next 50 years. Recent testing indicates that landfill gas is still present in small amounts, and a recent review of assessments has led the EPA to take a precautionary approach to determine whether it is present in a small number of nearby homes.

## Is there asbestos buried at the site?

Asbestos-containing material has been detected at Lot 101 Port Lincoln Boulevard Pasadena, in groundwater at 2 metres below ground level. Buried asbestos, if left undisturbed, does not pose a risk to residents. To cause a health risk asbestos fibres must not only be released into the air, but also be of a sufficiently small size and inhaled to cause a risk to your health. Asbestos does not cause groundwater contamination and is not considered a risk to human health if it enters the groundwater.

## Is the groundwater (bore water) contaminated?

The EPA does not currently hold information that would indicate the groundwater in this area is contaminated, however like all urbanised areas in the world, groundwater contamination exists in many places across Adelaide.

While private users are not legally required to do so, the EPA advises bore water to be tested regularly and ensure it is safe for its intended use. If you require any assistance in finding a company to test your bore water, or in interpreting the results, please contact the EPA on the details below.

Preventing extraction of contaminated groundwater is necessary to protect human health and also to prevent the spread of contamination. This can also be caused by drawing water towards a property if the groundwater is being extracted from a bore.

If testing confirms your bore water is contaminated, you are legally required under the *Environment Protection Act 1993* to notify the EPA.

### FURTHER INFORMATION

#### **For further information please contact:**

Site Contamination Branch  
Environment Protection Authority  
GPO Box 2607, Adelaide SA 5001  
Telephone: (08) 8124 4216  
Email: [engage.epa@sa.gov.au](mailto:engage.epa@sa.gov.au)  
Website: <https://www.epa.sa.gov.au>  
(Follow the link at the bottom to 'Site Contamination' then to 'Assessment Areas')

#### **For health-related information please contact:**

Scientific Services Branch  
Public Health Services, SA Health  
11 Hindmarsh Square, Adelaide SA 5000  
Telephone: (08) 8226 7100  
Email: [public.health@health.sa.gov.au](mailto:public.health@health.sa.gov.au)  
Website: [www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)

