

Stevensons Road Landfill (closed), Cranbourne - Gas migration

What happened?

Fig 1: When a landfill is closed, gas and leachate (contaminated water) are produced by the decaying waste. Extraction systems are installed in landfills to remove gas and leachate.

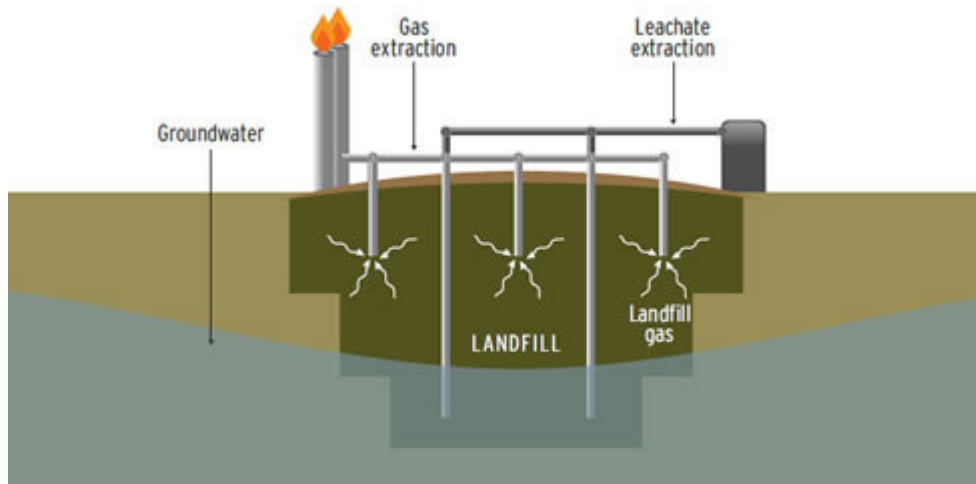


Fig 2: In the case of the Stevensons Road landfill site, the gas extraction system became flooded with groundwater and leachate, inhibiting effective gas removal. As gas continued to be produced, it moved out of the sides of the landfill into surrounding land. Gas can move through the small air spaces in soil.

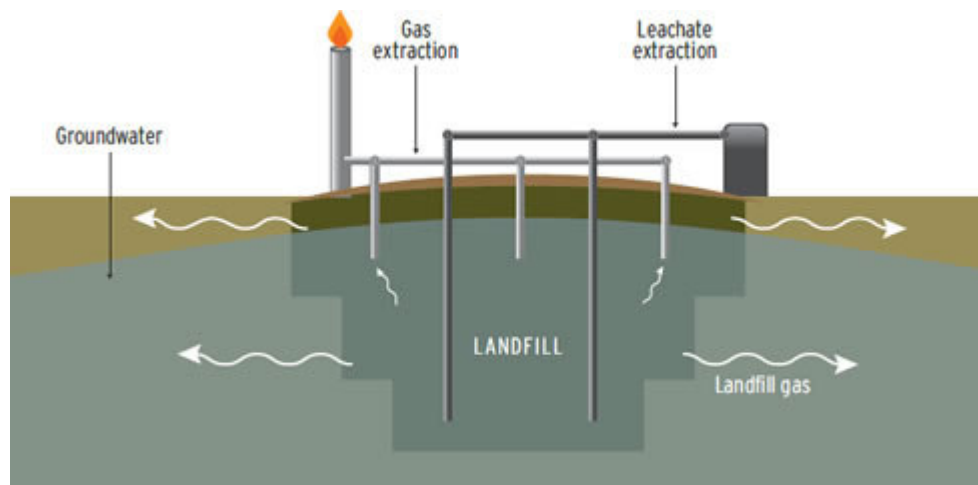


Fig 3: Methane gas is lighter than air, so the gas seeks pathways into the atmosphere through spaces in soil, often through underground service pipes.

Gas was detected in properties, in electrical pits and in the stormwater system at concentrations that posed a safety risk in areas of the estate. Monitors were placed in homes and around the landfill and a series of activities to address the immediate safety concerns were undertaken.

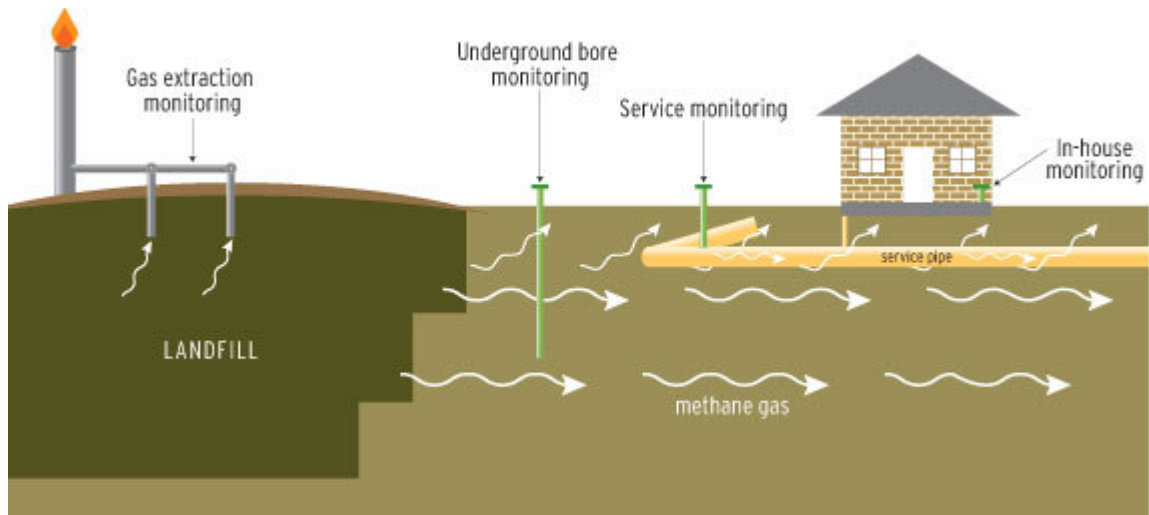
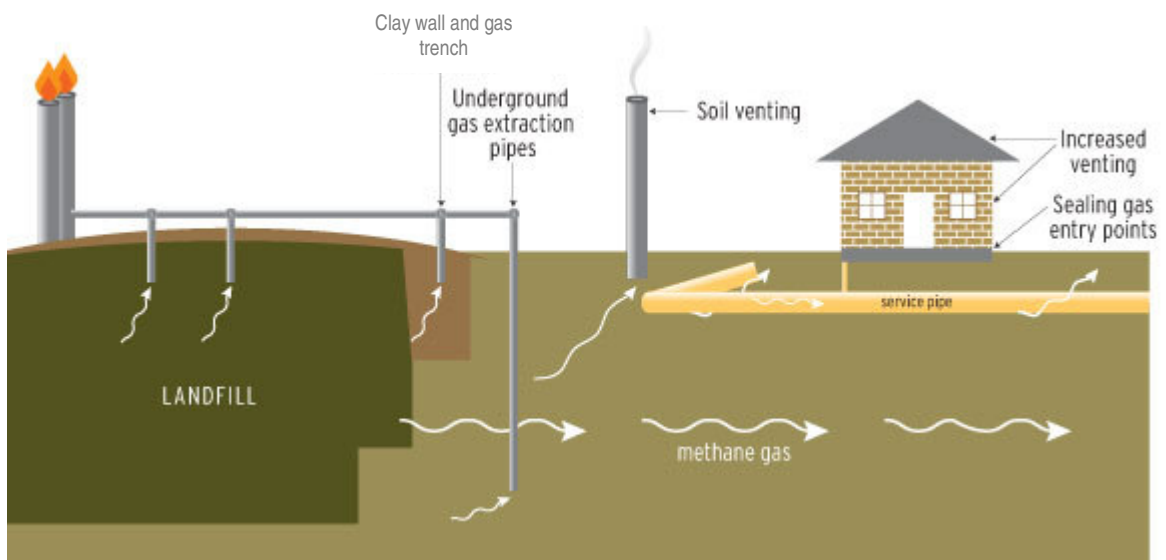


Fig 4: The City of Casey, the owner of the landfill site, have implemented a range of works to stop gas moving towards houses, to better extract gas from the landfill and to monitor safety in the residential areas. The production and movement of gas continues to be monitored.



Who to contact for help

Casey City Council owns and manages the closed Stevensons Road Landfill site.

Communications and support to residents being affected by this problem is being managed by Casey Council. Current information about safety messages and progress is available on their website: www.casey.vic.gov.au or through their Customer Service Centre ph: 9705 5200 during office hours.