FACT SHEET

Mangrove odours on Redlands Coast

Mangroves grow in wetlands and swamps in many areas along our naturally wonderful Redlands Coast.

They play an important role in maintaining a healthy ecosystem so we can enjoy everything our beautiful coastal environment offers both in and out of the water. If you live nearby mangrove wetlands you may notice a strong rotten egg odour at certain times of year. The odour is often mistaken for sewerage but is actually the result of natural processes that occur when organic matter from the mangroves breaks down in the soil.

This has been the case around Thorneside and Victoria Point. Investigations have found the odours are not from the Thorneside or Victoria Point Wastewater Treatment Plants.

Our naturally wonderful mangroves

Mangrove wetlands and swamps play an essential environmental role and are protected under the State Government's *Fisheries Act 1994 (Qld)*. Mangroves assist in nutrient cycling and provide a habitat for spawning and juvenile fish, prawns and crabs. Without them, the commercial and recreational fishing that our unique coastal environment offers would suffer. The wetlands are also vital roosting and feeding areas for migratory birds and help to stabilise our coastline, reducing erosion from sea currents, tides and waves.

What causes the odour?

The rotten egg smell coming from nearby mangroves at certain times of the year is the result of a natural process. Between May and November mangroves drop seeds which begin to be broken down by bacteria living in the soil. Oxygen is used as part of this natural break down process. When all the available oxygen is used up, sulphur is used instead, creating a gas by-product called hydrogen sulphide. It is this gas that is the source of the rotten egg smell.

Factors influencing the intensity of mangrove odours include:

- time of the year (usually May to November, depending on seasonal variability)
- how close the mangroves are to where you live or work
- seasonal rainfall and tides (high tides disperse organic matter closer to houses)
- wind direction and speed (influences where and how fast the odour is dispersed)
- number of mangrove seeds (more seeds mean more organic matter breaking down)

Health impacts

Queensland Health advises that there are no long-term health impacts associated with exposure to hydrogen sulphide odours as the levels are well below those known to cause health effects.