

Report on Dioxin Assessment - Noosa River Catchment February 2021

Questions and Answers

What are dioxins?

Dioxins and furans (collectively known as dioxins) are a family of persistent organic pollutants that share similar structures and biological effects on the human body and the ecosystem. There are several hundreds of dioxins from these three groups, but only 17 are toxic. The most toxic dioxin, and most studied across the world, is 2,3,7,8-tetrachlorodibenzo para dioxin (TCDD). The presence of the dioxin TCDD was investigated in Noosa Lakes and biota.

Where do dioxins come from?

Dioxins can form during natural processes such as forest fires or volcanic eruptions and are thought to be found naturally in kaolinitic clays. Dioxins can also occur as by-products of human activities such as waste burning, industrial combustion processes, motor vehicles, herbicide and pesticide production or the bleaching of pulp and paper.

Why are there dioxins in the Noosa River Catchment?

Dioxins have been recorded in sediments samples collected all along the east coast of Queensland. They were also found in all sediment samples collected in the National Dioxin Program undertaken in 2005. The concentrations of dioxins and the types of dioxins found in the Noosa River Lakes are not unusual and are similar to other sites in Queensland. An assessment of the potential sources of dioxins in the Noosa River Catchment is currently being undertaken.

Was the dioxin TCDD found in the sediment throughout the Noosa River Catchment?

No. The dioxin TCDD was measured in trace amounts in sediment at only two of the seven sites sampled. It was not found throughout the catchment. Trace amounts of dioxin were measured in biota.

Is fish caught in the Noosa River safe to eat?

Yes. You can continue to eat fish caught in the Noosa River and in the lakes. Fish is an important part of the diet, the benefits of which far outweigh any potential risks associated with contaminants such as dioxins that are naturally found in Australian waterways. You should aim to eat 2 to 3 serves of fish per week from a variety of sources. However, be aware that Food Standards Australia New Zealand recommends limiting the consumption of some large, predatory species, such as shark and catfish. Further information is available from:

<https://www.foodstandards.gov.au/consumer/chemicals/mercury/Pages/default.aspx>

Is it safe to swim in the Noosa River area?

Yes. There were no dioxins detected in the water sampled from the Noosa River Catchment. Dioxin concentrations in water are expected to be significantly lower than sediment concentrations. Swimming in water is not expected to be a significant source of exposure to dioxins. There are many hazards that you need to be aware of when swimming in natural water bodies. To minimise risks, you should avoid swimming after heavy rainfall, avoid swallowing water, cover cuts and abrasions before swimming and wash thoroughly after swimming.

