# **AMMONIA**

Water Supply (Safety and Reliability) Act 2008 Trade Waste Management Plan 2019



## WHAT IS AMMONIA?

Ammonia is a chemical compound made up of nitrogen, carbon and hydrogen. It can be toxic, and contributes to the nutrient load discharged to the receiving waters.

#### HAZARDS OF AMMONIA ENTERING THE SEWER

There are several hazards caused by the discharge of ammonia to the sewer.

- The substance is volatile and the sewer atmosphere can contain significant concentrations of ammonia.
  Ammonia in the sewer atmosphere (sewer headspace) poses an inhalation hazard to sewer workers. This is a greater risk at higher pH (pH>8).
- 2. High ammonia levels in sewage dramatically increase the load on a sewage treatment plant, which requires additional treatment at an extra cost to council.
- 3. High levels of ammonia may also cause a treatment plant to breach licence conditions for the discharge of effluent from the plant.
- 4. Ammonia pollution is a matter of increasing concern for regulatory authorities because of the serious threat it poses to the balance of sensitive habitats and to flora and fauna. Controlling the levels of ammonia discharged in wastewater can make a significant contribution to reducing its environmental impact.

# **COUNCIL'S POSITION ON AMMONIA GOING TO SEWER**

In accordance with Council's *Trade Waste Management Plan*, Townsville Water will not permit the discharge of ammonia to sewer unless the concentration is less than 100 mg/L.

Approval for the discharge of trade waste with ammonia concentration up to 200 mg/L may be given, provided the temperature remains below 30°C and the pH is below 8. (Conditions will apply.)

The total load (kg/day) of ammonia proposed to be discharged to the sewer will also be considered when assessing an application for trade waste approval

Prior to granting any trade waste approval, council will give careful consideration to the following criteria.

- » The potential of the amount, type and strength of the proposed discharge to harm the sewerage system or jeopardise the health and safety of anyone working on the sewerage system.
- » The effect that the proposed discharge could have on any existing or potential re-use of wastewater or sludge.
- » The capacity of the sewage treatment plant to treat the waste to an acceptable standard.

## **MORE INFORMATION**

For more information, contact council's Assets and Hydraulics Unit.

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