

# LAUNDRY STAINED BY RUST IN THE TOWN WATER SUPPLY FACT SHEET

## INTRODUCTION

This fact sheet provides current information on the effect of the iron deposits that naturally occur in the Shires various town water supplies on washing and information on how deal with same on a personal level.

Iron and manganese are common metallic elements found in the earth's crust. Water percolating through soil and rock can dissolve minerals containing iron and manganese and hold them in solution. Iron and manganese are non-hazardous elements that are a nuisance in a water supply because of the staining properties

Oxidation of dissolved iron particles in water changes the iron to white, then yellow and finally to red-brown solid particles that settle out of the water. These sediments are responsible for the staining properties of water. These precipitates or sediments may be severe enough to block water pipes.

Iron can affect the flavour and colour of food and water. It may react with tannins in coffee, tea and some alcoholic beverages which affects both taste and appearance.

Iron will cause reddish-brown staining of laundry, porcelain, dishes, utensils and even glassware. Soaps and detergents do not remove these stains, and use of chlorine bleach and alkaline builders (such as sodium and carbonate) may intensify the stains.

Iron and manganese deposits will build up in pipelines, reservoirs and filters and this reduces the available quantity and pressure of the water supply. When built up iron deposits and the velocity of water flow reach a critical point, or when work is carried out on pipelines, the iron deposits are disturbed and transported to various outlets.

Source: <http://www.water-research.net/iron.htm#options>

## WHAT TO DO IF IRON (RUST) STAINS OCCUR ON YOUR CLOTHES?

- **Do not dry them in the dryer** before treating the stains. Heat sets the stains and makes them difficult or impossible to remove. Heat and chlorine bleach make the problem worse.
- Rewash the clothes immediately in clear water with a heavy-duty detergent. If the water in your water system is still discoloured, do re-laundering at another residence where the water is clear, if possible.
- If this issue continues, then launder with a commercial rust remover

Brands of rust removers include:

- RoVer®;
- Rit Rust Remover®;
- Iron-Out®;
- Miracle-Rid-Iron®;
- Whink® Rust Stain Magic; or
- Pro-Laundry Whitener™.

- The important ingredient in rust remover is an acid, usually either oxalic or hydrofluoric acid (these acids can cause skin or eye irritation, burns, or poisoning). The active ingredients combine with the iron and loosen it from the fabric, then hold it in suspension in the wash water. The compounds are poisonous if ingested.
- Rust removers must be used carefully and according to the manufacturers' instructions. When finished **rinse the clothes thoroughly** as any acid remaining may deteriorate fabrics.
- Commercial rust removers are intended for use only on white or colourfast fabrics.
- **Test** coloured clothes for colourfastness before attempting to remove rust stains with commercial removers.

Source: <http://ohioline.osu.edu/hyg-fact/5000/5539.html>

- Another remedy (not endorsed by Council but provided for information) to treat a load of laundry is:
  - To mix 1 part white vinegar with 3 parts hot water. Add two cups of salt and mix thoroughly.
  - Put the clothing in by batches so that there is enough solution to thoroughly soak all of the stained items;
  - Allow the garments or fabrics to soak in the vinegar solution overnight;
  - Drain and launder according to the tag's recommendations for each item.

Source: <http://www.mrscleannw.com/tips/removing-rust-stains.html>

## ISSUING OF COMMERCIAL RUST REMOVER

Commercial Rust Remover (and user instructions) is available to residents to remove rust stains from clothes. The product will be offered and provided when a resident brings the issues to the attention of Council staff.

Residents will be offered one or both of the following Commercial Rust Removers:

- Citric Based Remover; or
- Chemical Based Remover.

All issues of commercial rust removers must be registered on Councils Customer Services Request system. If the commercial rust remover is available in retail stores without a Material Safety Data Sheet (MSDS) being supplied, Council will not supply a MSDS.

*Disclaimer: This fact sheet is for general information purposes only. While all care has been taken to ensure all information is correct, Narrabri Shire Council accepts no responsibility for damage caused by this information; nor liability accepted for any unauthorized use of the information contained herein.*