

Scale Reduction Trial Questions and Answers

What is the Scale Reduction Trial?

The Scale Reduction Trial aims to test an anti-scalant which has previously been proven to reduce the build up of scale caused by hard water.

In developing a long term water security plan for Eyre Peninsula, a key issue raised by the community during the consultation process was the hardness of the region's water supply. The long term plan, in response to these issues raised by the community, recommended that a trial be undertaken to determine whether scale build up caused by hard water could be minimised.

What is water hardness?

Water hardness refers to the presence of calcium and magnesium in a water supply, which is related to geological characteristics at the water's source. Approximately 85% of Eyre Peninsula's water supply is sourced from groundwater basins, attributing to the hardness of the water. Hard water, containing elevated levels of calcium and magnesium, can form scale in kettles, electric irons and washing machines. If the scale collects on heating elements it can make appliances less efficient.

Scaling can also occur in polyethylene pipes used to carry water long distances on some farming properties. Our investigations indicate elevated water temperature is the main cause of scaling on Eyre Peninsula. When water temperatures increase, the soluble materials that create hardness in water change to insoluble materials.

How is SA Water addressing scaling?

To improve water quality on Eyre Peninsula, SA Water will undertake a trial of the anti-scalant and registered food additive Calgon. This trial will enable SA Water to gather important feedback from the community regarding the effectiveness of the additive on reducing scale.

What is Calgon?

Calgon is a registered food additive which has been approved by the National Health and Medical Research Council. It has been proven to be a simple method to reduce the scaling effects caused by hard water and has recently been used successfully by the Western Australian Water Corporation. The additive prevents scale by allowing the calcium to be maintained in a soluble form.

It's important to note the anti-scalant does not reduce hardness - it prevents/reduces scaling which is caused by hard water.

Why was the Haslam area selected for the trial?

Haslam and surrounding area was selected as the location for the trial for operation reasons. Due to the area's proximity to a key water main it was determined the region would be suitable for such a trial.

How will the anti-scalant be introduced into my water supply?

To enable SA Water to introduce the anti-scalant into Haslam and the surrounding community's water supply, SA Water will construct a small dosing plant. This plant will dose the region's water with controlled and monitored amounts of the additive.

Where will the plant be located and what will it look like?

It is proposed the dosing plant be placed inside a shipping container of about 8 metres by 3 metres and located alongside Mundy Road.

Once the trial has been completed the container will be removed and the site returned to its initial state prior to the beginning of the trial.

How does the trial impact on me?

As a member of the local community and a customer of SA Water, we would like you to participate in the trial by providing us with any feedback you may have. At the end of the trial all of our customers will be sent feedback forms. The information you provide to us will assist in calculating the effectiveness of the trial and help determine if the anti-scalant should be introduced to other towns across Eyre Peninsula which has experienced a problem with scale.

You are under no obligation to provide feedback on the trial, however any information you could provide would be greatly appreciated.

SA Water will also establish a Reference Group featuring a cross section of the Haslam community to assist in further gathering the community's views.

When will the trial begin?

It is anticipated that the trial will begin around late August and will run for a period of 12 months. In order for SA Water to gauge the full effect of the trial it needs to be conducted in both the cooler and warmer months.

Will I notice any change to my water supply?

You will not notice any change to your water supply. The anti-scalant does not affect the water's colour or taste. It is a food additive and the water is safe for consumption by both humans and stock.

SA Water has received the necessary approvals from SA Health to trial the additive.

Where can I get more information about the trial?

For more information about the Scale Reduction Trial call the SA Water Project Hotline on 1800 812 362.