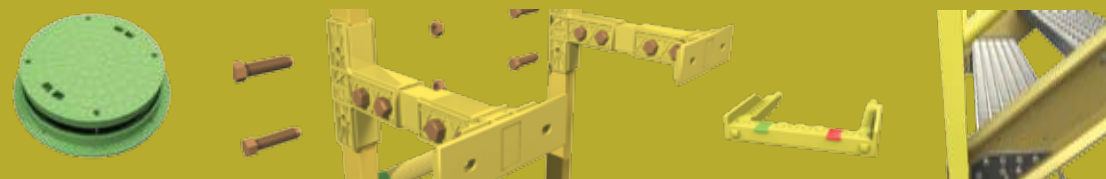
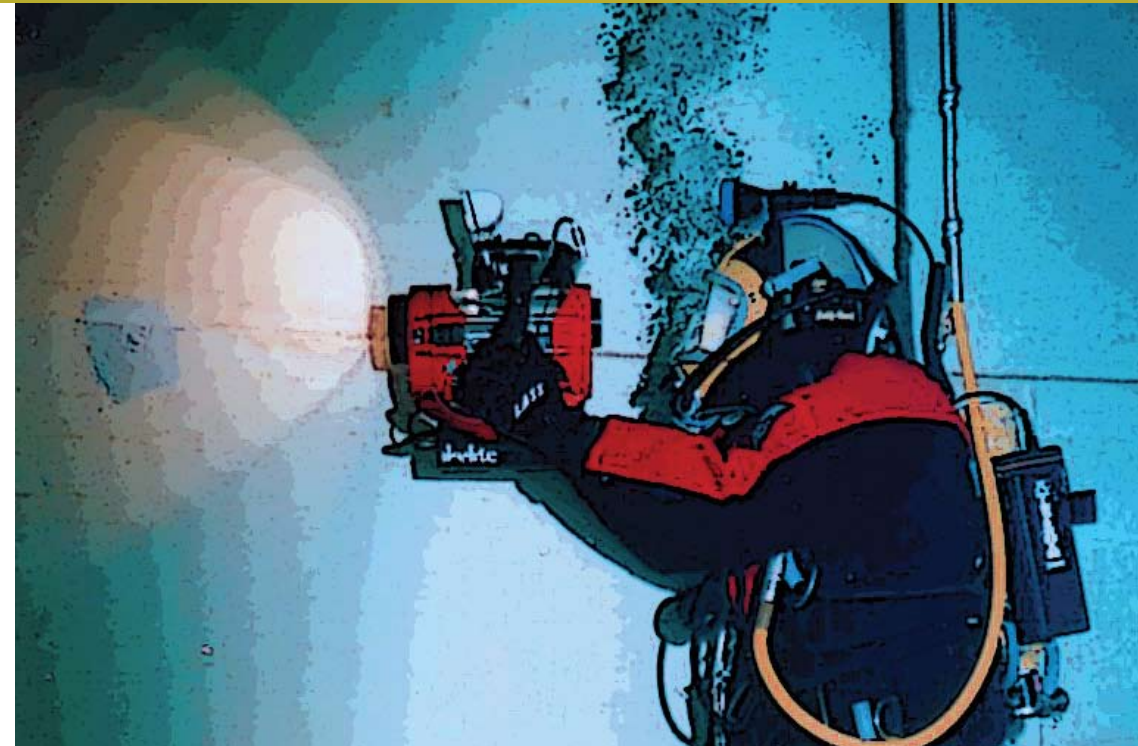


### SA Water Condition Assessment Program

SA Water had contracted DBS to inspect their 650 + tanks over a three year period. The Assets and Infrastructure group required accurate information to enable long-term planning and budgeting to be put into place while the tank assets were still in reasonable operating condition.

A Benchmarking system was devised to compare the individual tanks against the overall group average – this has enabled poorly performing tanks to be prioritised for modifications or rehabilitation.

Nine key areas were analyzed from the field inspection data to give managers up-to date results in Security, Contamination, Safety, Confined Spaces, External Structural & Protective Coatings, Internal Structural & Protective Coatings and Carbonation.

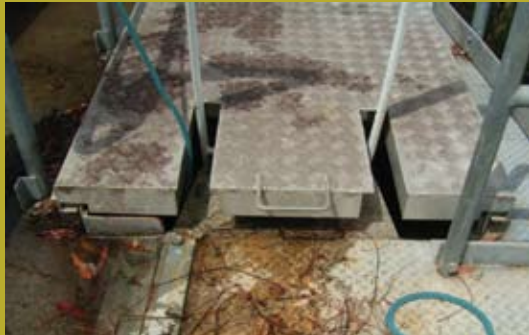


# Contamination and the GST Principle



**Many water storage tanks have poorly designed access areas – a balance needs to be achieved between personnel safety and water quality.**

Great importance has been placed on eliminating 'trip hazards' around entry hatch areas – the downside is that all sorts of contamination accumulated around the surrounding areas are free to drain into the tank, and this directly affects water quality.



Clients and designers should apply the GST principle (grain silo test) to all water storages – grain silos and water tanks are very similar in structure and design, however grain storages have to be one hundred percent free of water and debris contamination to avoid spoiling the produce inside.



Why is it acceptable that storm water, bird faeces and leaf debris can freely enter our water storages? Our drinking water also needs to be 100 percent free of any form of contaminant that will adversely affect its quality.

# Under-roof Condition Assessments

**The Aqualift Team subscribe to safe, efficient working techniques.**

Diver orientated inspections are often followed up with a professional assessment to provide engineering solutions for our water storage structures.

Aqualift provide the safety, access and support to take engineering staff inside tanks for detailed structural assessments of the roofing and upper wall areas.

Several types of inflatable boat are used, depending on the hatch sizes available – our canoe is very compact for tighter areas and it can be inflated after entry into the tank by an operator wearing a dry suit.

Tanks are filled to 90/95 percent capacity to provide close access to the structural members and connections of the roof framing and wall areas – laminated plans can be carried in the boat and marked accordingly, for later transfer during the report writing process.

A battery powered outboard motor is used to manoeuvre around within the larger tanks and all personnel wear head protection combined with dry suits or buoyancy jackets when working over water.

