PASS

Problem Accepted - Solution Supplied

Project Title *-less than 12words*	Vermin Proofing storage tanks
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Job Title and Organization	Acting Coordinator, Civil Asset Maintenance, Unity Water

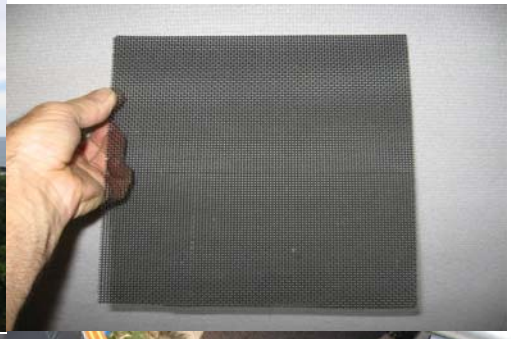
THE PROBLEM……	
What was the problem that you experienced?	A lot of our tanks had mesh ventilation panels missing on the upper wall areas and this left the tanks open and vulnerable to bird and vermin entry.
How did the problem impact you or your work situation?	The tanks had poor access for mobile cranes or cherry pickers, so it was difficult to replace the missing or defective panels safely and cost effectively. Water quality would have been affected if the panels were not replaced in a short time period.
How long had the problem been occurring?	The problem was not obvious at first – the defective panels were too high off the ground to be noticed by our operations staff during their normal inspections. It was recognised as an issue following a detailed condition assessment program using external contractors, who are commercial divers and rope access technicians.

THE SOLUTION……	
How did you come up with the solution?	All the existing panels would have failed over time; we discussed various options for replacing all the panels on each tank, rather than just the missing ones.
Who helped work on the solution?	Gary Ninnes our area maintenance Supervisor and the contractors who discovered the problem in the first place
Describe the solution.	The contractors decided to use Technical Rope Access techniques to work from the 'top down', rather than use machinery based on the ground – most of the tanks had poor 'all round' ground access. Stainless Steel security mesh panels were selected for their robustness and ability to withstand corrosion and distortion during fixing. The fine SS mesh was also insect proof when compared to 'off the shelf' galvanized ventilation panels that have been used in the past. The contractors lowered themselves down, using an SRT 'Ozpod' rescue frame, fixed two adjacent panels at a time, and then climbed back up, shifted the Ozpod along and repeated the process until all was complete. They fixed between 30 and 40 panels a day.
How has it helped you at work?	Water quality is no longer compromised from an identified source and the fix is a long term one, and should not be required to be done again for the life of the tank – the original panels only lasted around 10 to 15 years that we are aware of
Suggest improvements, if time or financial limitations were not a factor.	This type of SS mesh panel should be installed in all new tanks from now on – the existing type of standard 'fly wire' mesh has proved to be ineffective over a relatively short period of time.
Any other comments you would like to make?	Part of this submission is to make designers and asset owners aware of how things can be improved. Also better access needs to be included in all new tank designs, so that machinery and other access equipment can be used easily and safely for all future maintenance issues.

Insert photo of the problem

Poor site access and the original 'fly wire' mesh was inserted into the socket and held in place with a split piece of the same pipe material

Insert photo of the solution



Specially trained staff used ropes to access the vents and attached SS panels, held on by 'knock in' pins and SS 'mudguard' type washers on each corner.

Are you a member of WIOA? Yes
Email: Postal address: Unity Water, Main Drive, Kawana STP Town/City: Kawana State: QLD Postcode: 4701 Phone: ( ) Mobile:
Have you obtained management approval to submit this PASS project? Yes

Once this form is completed please send it to:

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Or Post to:

WIOA
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Thankyou