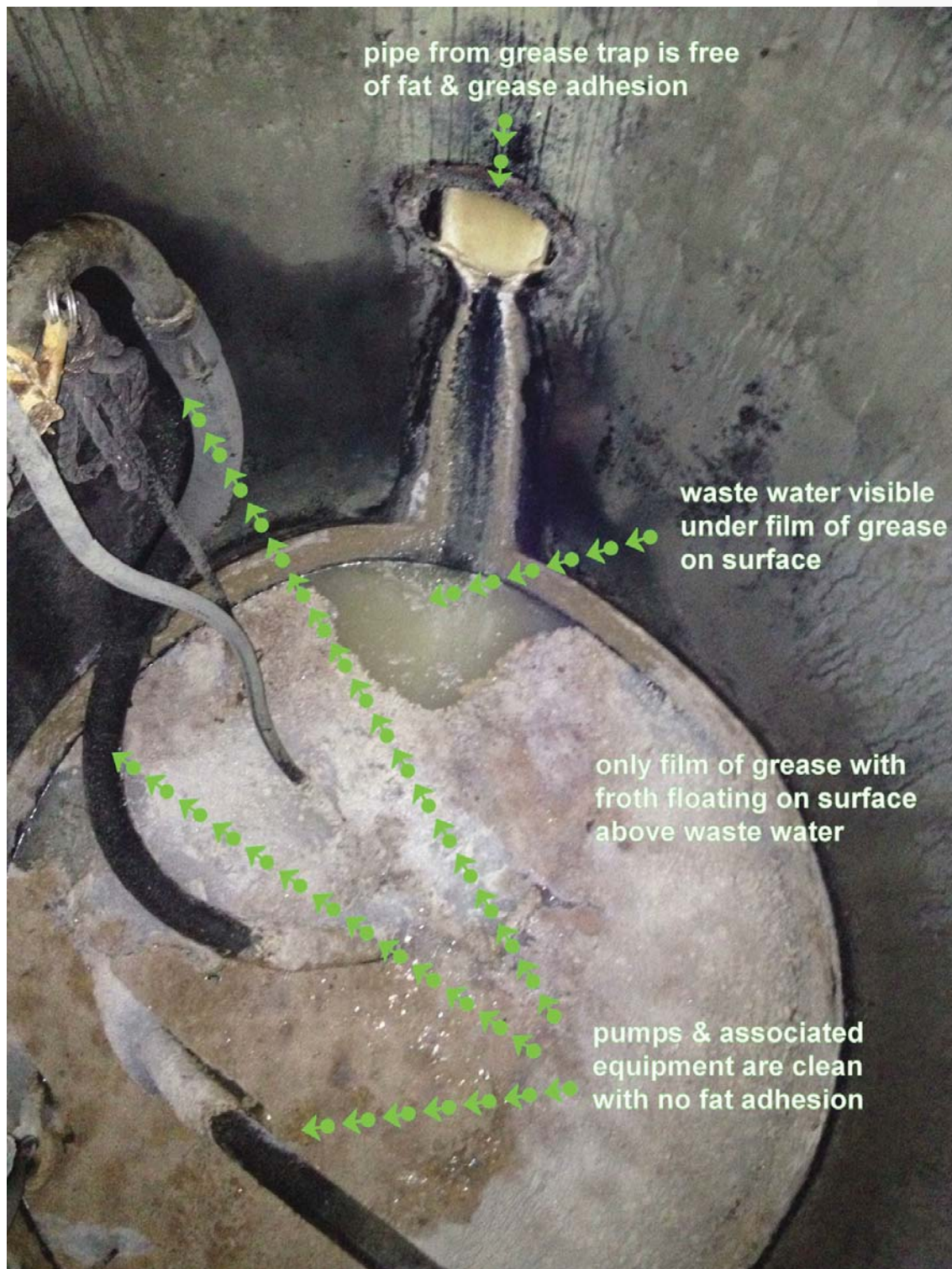
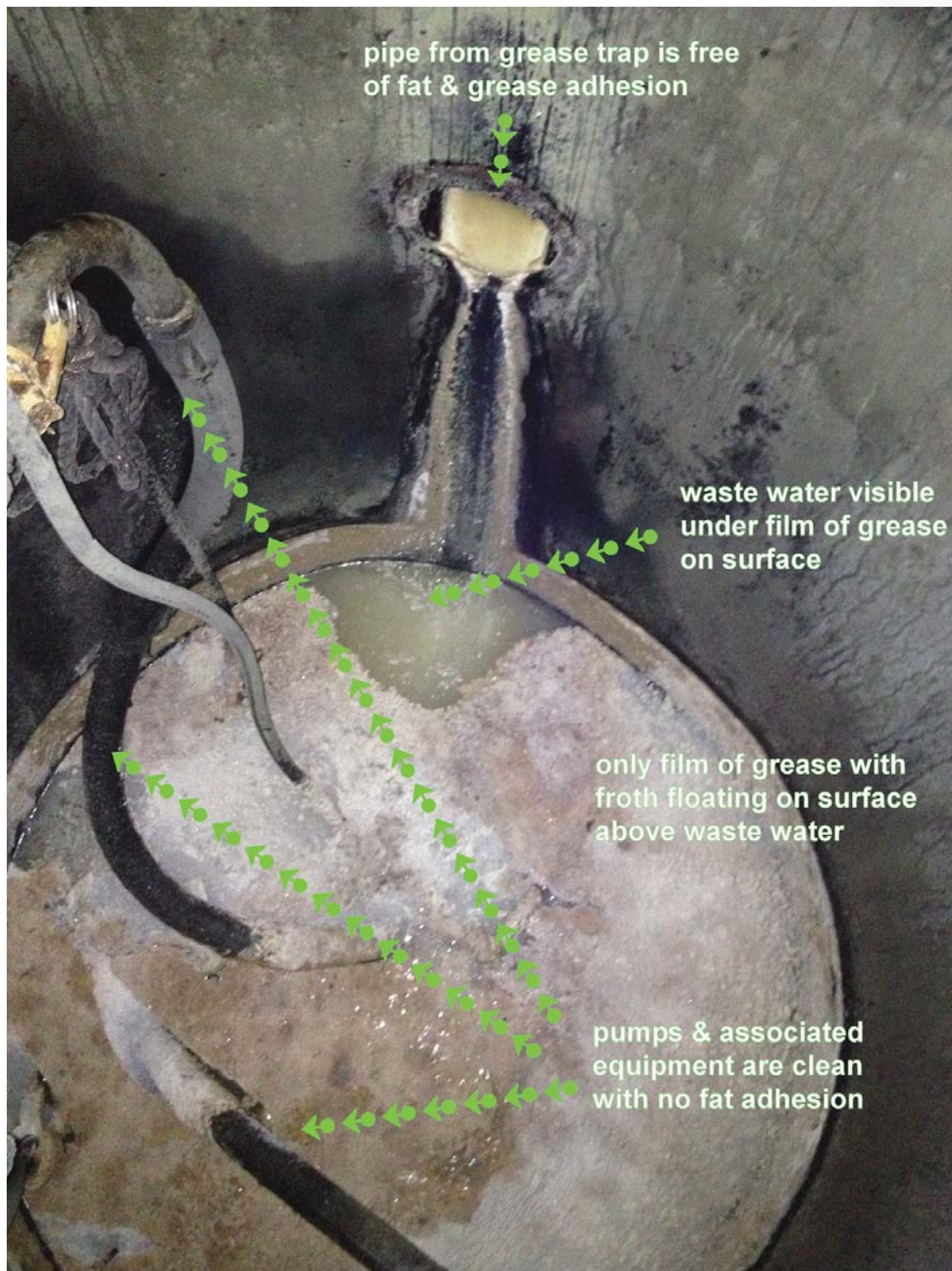


The above photo is in complete contrast to the one taken on 17 July.

The state of the pump well was a complete contrast with only a film on the surface and none of the working parts coated in grease.

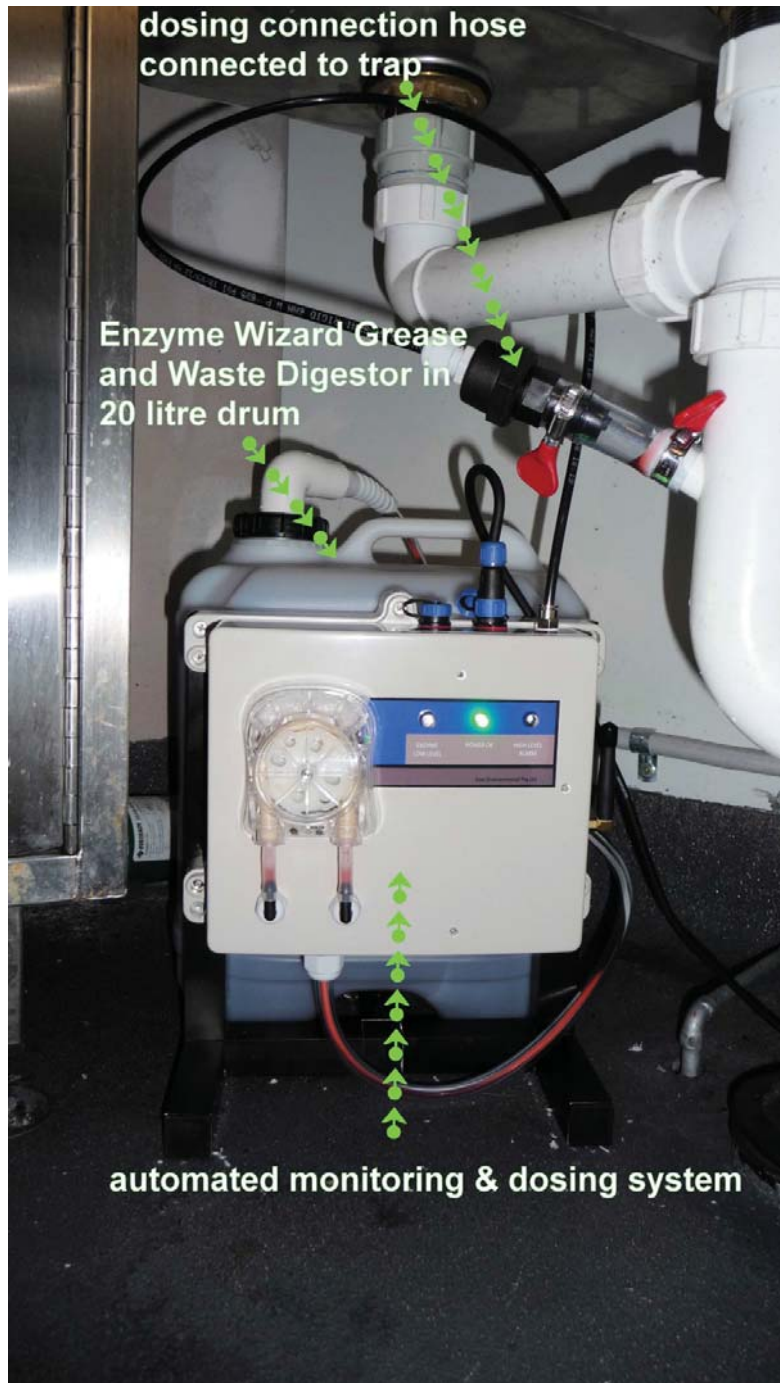




In reality there was no real need to pump out the grease trap on 14 August. It is interesting to observe that within 10 days the introduction of Aquatemp Enzyme Grease & Waste Digester had eliminated odour problems and as can be seen by the photos above the condition of the grease traps had improved remarkably in 6 weeks.

11 September Installation of Automated Monitoring and Dosing Unit

As manual dosing had worked so successfully it was decided to install an automated dosing unit under the bar sink as can be seen in the photo below.

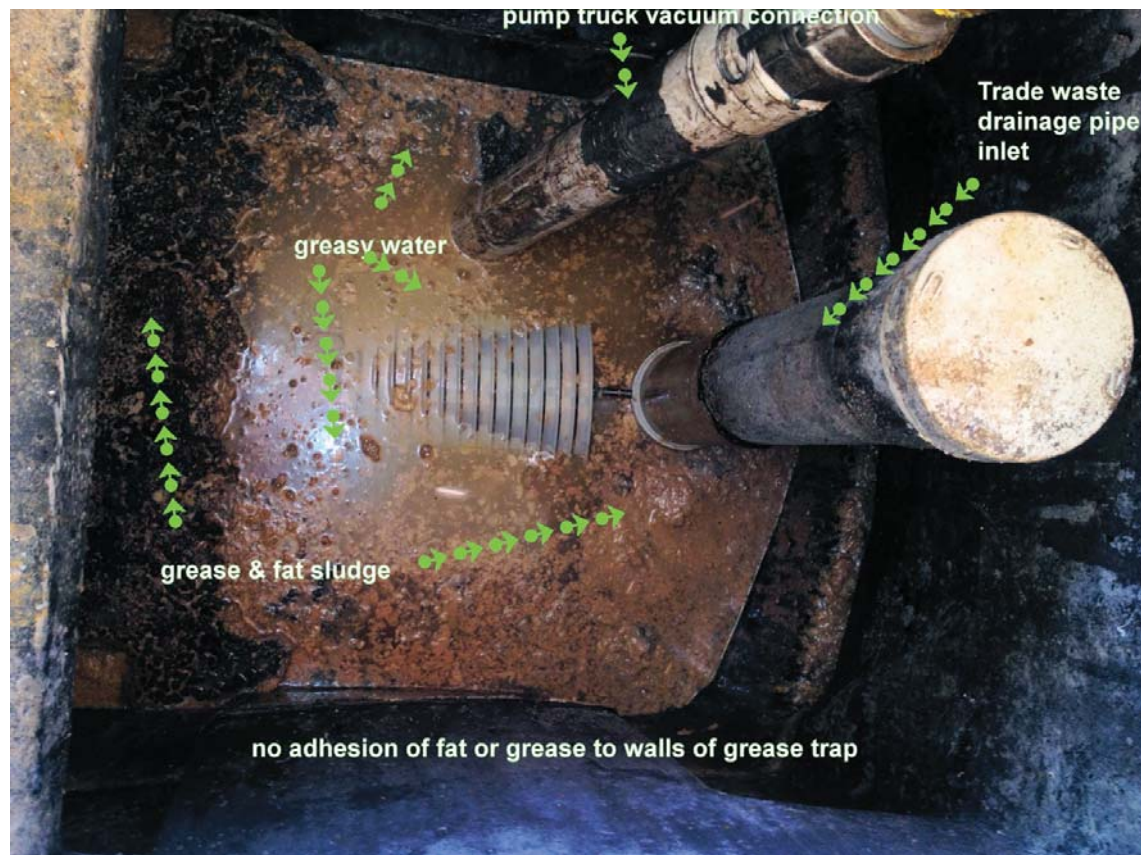


The grease trap & pump well were pumped out as scheduled on 11 September and the pump well filled with clean water to pump height. The installation of the automated monitoring and dosing unit allows this unit to automatically release 300mL every day of Aquatemp Enzyme Waste & Grease Digester at 2.30am into the trap system under the bar which then flows through the trade waste pipes to the grease trap and ultimately the pump well.

This process ensures a uniform delivery of dosing at a regular interval every day plus continual monitoring for system power failure, failure of dosing to occur and low capacity of Aquatemp Enzyme Grease & Waste Digester in the 20 litre drum with SMS alerts to staff at Southport Sharks and Whywait Plumbing .

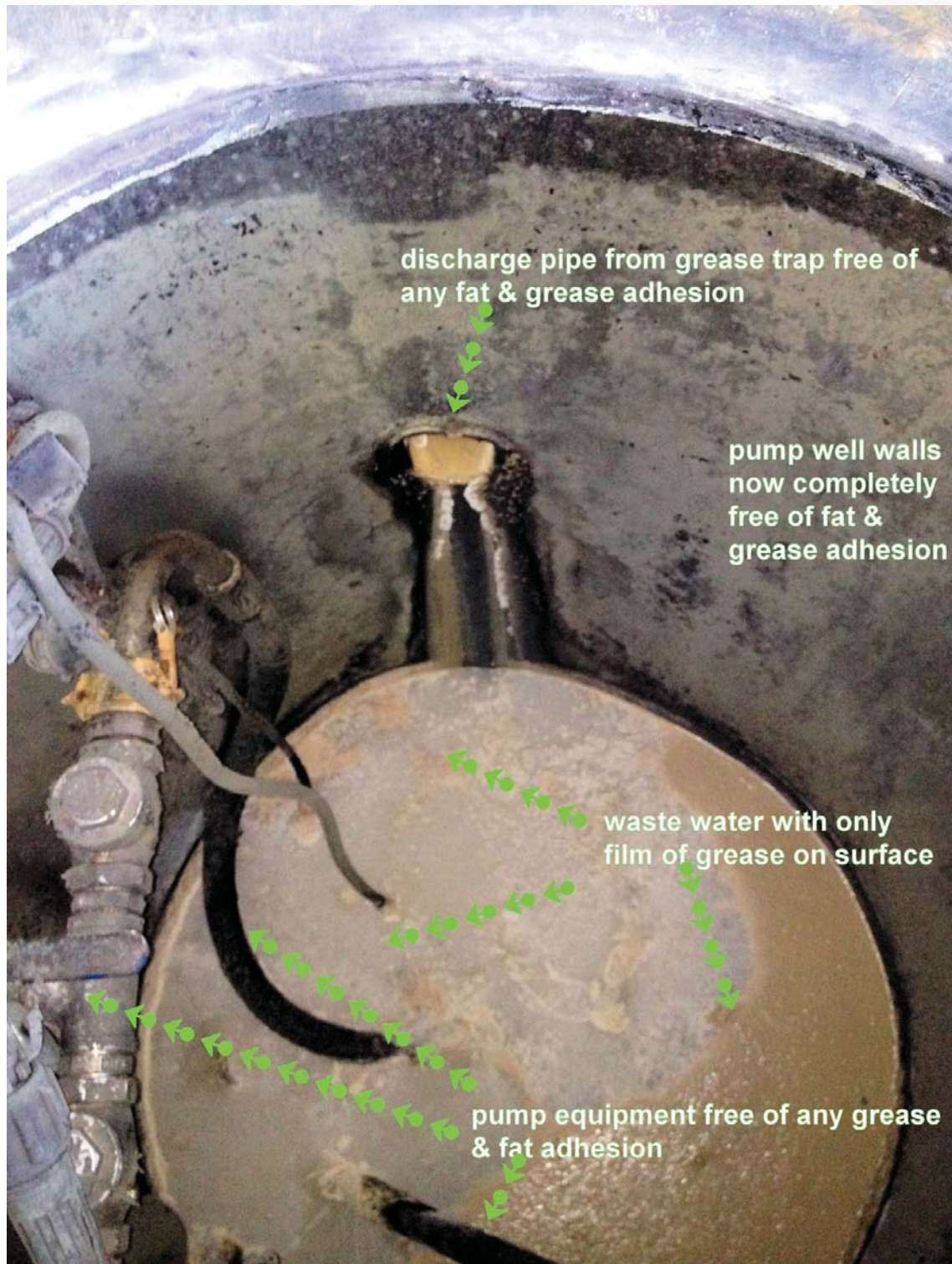
Grease Trap 9 October

On 9 October the monthly pump out was undertaken as scheduled and the photos below show a marked change in the fats and grease with there being no solids and there only being a film of grease on the surface. There was virtually no odour and all three lids could be opened at the same time.









Conclusions and Recommendations

Overall the success of this trial dosing system cannot be understated as it has eliminated a number of issues that are consistently confronted when dealing with decaying biomass in a grease trap.

In regard to this particular grease trap it has been a source of many issues since its installation with odour emission's being a principal concern because of their obvious impact on the operation of Southport Sharks. That the dosing has solved this was to be expected but it has been the solving of operational issues that will have the biggest impact over the life of the operation of this grease trap and its associated pump well and pumping infrastructure.

The principal benefits from installation of a fully maintained and automated grease trap dosing system have been and will continue to be:

- Odour elimination and control which improves customer and staff satisfaction
- Business management improvement with reduced risk and costs due to sewer and pump failures with problems resolved with minimal management cost to Southport Sharks with a fully automated and managed system
- Cleaner trade waste drains eliminating future maintenance and blockages
- Cleaner grease trap with biomass from fats & grease treated and broken down eliminating future maintenance and blockages
- Cleaner pump well with only waste water flowing in that has been treated to eliminate the build-up of fats & grease in the pump well and all of the associated infrastructure prolonging the operational life of the pump system and eliminating future maintenance and blockages
- Cleaner waste water being pumped into Southport Sharks sewer drains which reduces the build-up of fats & grease in the drains eliminating future maintenance and blockages
- Cleaner waste being pumped out of the grease trap that is already breaking down naturally that ultimately has to be treated at City of Gold Coast thus reducing treatment costs

In general we would recommend that the automated dosing system be made a permanent installation as the benefits are indisputable plus we recommend that:

- Consideration in future budgeting for installation of automated dosing to all the trade waste and grease trap infrastructure at Southport Sharks
- Negotiate with Gold Coast Water trade waste officers to have pump out frequency reduced on grease traps with automated dosing systems to reduce the operational costs of Southport Sharks