

CASE STUDY #3

CASE STUDY FOR HIGH SILT EFFLUENT SITUATION

subject site ...

The Pheasant and Quail Pub , Kelowna, BC, Canada

the immediate problem ...

The Pheasant and Quail had a recurrent problem with the drains due to FOG effluent from the kitchen. The existing in- ground 50 GPM trap was not effective in solving the problem. The wash up area featured a pre-rinse sink (with a spray faucet and perforated tray) directed through the grease trap together with an American Dish Service 3D series dishwasher which was directed to bypass the grease trap. (the hot water would cause “wash through” of any retained grease cake)

the f.o.g. solution ...

It was agreed to fit a GOS 40 (10GPM) to intercept both the pre-rinse sink and the dishwasher effluent. This arrangement was highly effective in removing the FOG from the effluent stream

the second problem ...

Unfortunately the Goslyn separation tank was being clogged up by the very high silt load being generated by the pre-rinse sink. Attempts were made to lessen the silt load by more diligent scraping off of food debris from the plates and cooking pans but this proved to be problematic especially when the restaurant was busy due to time constraints. A short term solution was to completely drain and clean out the Goslyn on a weekly basis to remove the accumulated silts. Again this was not seen as a productive use of time.

the silt solution ...

A receiving tank was designed to place between the pre-rinse sink and the Goslyn. This was sized so as to allow the silts to settle out as the effluent passed through but to allow the FOG to spill over an internal weir (along with relatively silt free water). The resulting “clean” effluent was then directed to the Goslyn as before. The base of the receiving tank was sloped at a steep angle to encourage the silt towards the take off valve (1.5” diameter) where it could be easily drawn off as a concentrate and disposed of in the kitchen trash bin.

net results ...

The receiving tank proved to be highly effective in removing the silt load from the effluent stream and the Goslyn could now work to full efficiency to protect the drain lines

