



SHAY MURTAGH

Insurance

Be sure to include two electric pumps of the sewage treatment plant in your household fusion policy, along with other electrical appliances (refrigerator, washing machine etc.)

Desludging

When required, desludging is to be arranged and paid for by the owner. Please observe advice given above in order to minimise the frequency of desludging of the primary treatment tank. Desludging will vary from five to ten years (similar to septic tank system) depending on use and maintenance treatment of the system. Poor quality effluent or odour problems may indicate this is necessary.

Warranty

Shay Murtagh Pre-cast as manufacturer of the sewage treatment plant or the agent/supplier on behalf of Shay Murtagh Ltd warrants that the tanks supplied are manufactured to the Irish Agreement Board Certification and there is a warranty on the structure of the tanks for 30 years from the date hereof. The warranty of fittings, pumps and plumbing components are twelve months from the date hereof. It being understood that any failure of the system caused by the customer's non-compliance with the operating instructions or actual interference with the system or any of its parts will render such warranty null and void. Please note that maintenance does not include the replacement or repair of any mechanical, electrical or civil items outside the one year warranty period.

Servicing Requirements

At the time of commissioning, your sewage treatment plant will be checked for correct operation. Local Authorities and the EPA have determined minimum effluent qualities that may be discharged and the treatment plant has been designed to exceed these standards. It must be understood that mandatory half yearly servicing is to be carried out by an authorised person, at which time any necessary adjustments to the plant will be carried out. Annual service contracts are available from your SEPTTECH serviceman at a moderate charge.

Landscaping

When landscaping around your sewage treatment plant be sure to plant only small shrubs and ground cover. The use of pinebark or a similar product is also recommended. Larger trees and shrubs with high moisture demands may cause damage to your treatment plant by intrusion of their root system. When planting out your irrigated area, high nutrient and high moisture tolerant plants should be chosen. It is suggested that advice be sought from your local nurseryman regarding choice of suitable plants.

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Owners Operating & Maintenance Instructions

Thank you for purchasing our sewage treatment plant. Please take a few minutes to read this leaflet so that together we can ensure you receive many years of trouble free service.

SEPTTECH sewage treatment plants are the latest technology and have been designed to give excellent effluent results with low running and maintenance costs.

Shay Murtagh Ltd.
Raharney
Mullingar
Co Westmeath

Call-Save - 1850 200034

How our Septech sewage treatment plant works

All liquid wastewater from the household (bathroom, toilet, kitchen and laundry) is treated. The clean, clear liquid is then automatically discharged by way of electric pump to the designated area. All wastewater is gravity fed into a Primary Sewage Tank where the waste undergoes settlement and digestion during a retention period of approximately 24 hours. The settled wastewater then flows in to the SEPTTECH unit. This unit is divided into two distinct chambers - submerged contact aeration (SCA) tank and humus tank.

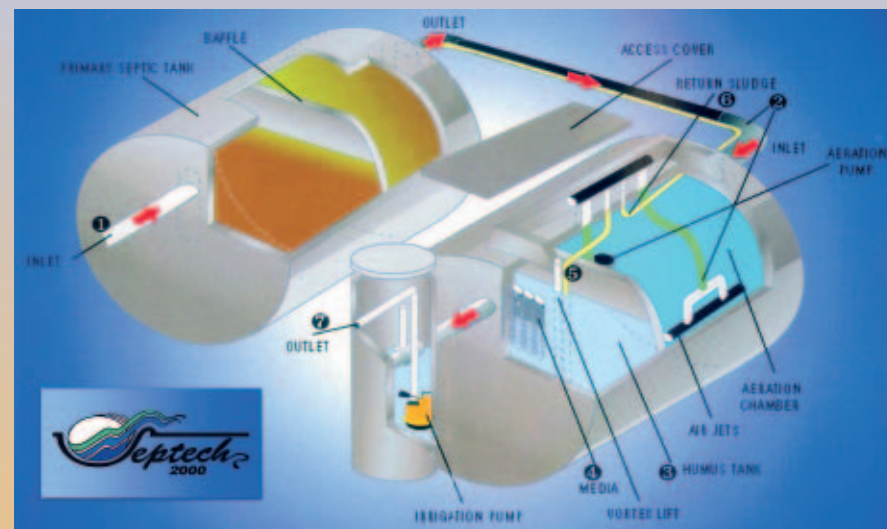
Effluent from the Primary Sewage Tank then flows into the SCA chamber. During regular time clock intervals, water and air are pumped into the SCA tank by means of strategically placed jets. The jets are positioned so as to cause a vigorous overturning and turbulence of the tank contents. Effluent entering the SCA chamber is forced into a spiralling flow pattern. A biomass develops within the sludge particles tumbling through the tank. This biomass assimilates nutrients and oxygen from the water leading to gradual reduction of impurities as the effluent passes through the tank. The effluent flows and sludge particles then flow into the humus tank where the sludge particles settle to the floor of the tank and the effluent flows upward through a contact media. This is plastic contact media on which a biomass acts as a tertiary interception and removal centre for remaining BOD and suspended solids, thus further polishing the effluent before flowing into the contact sampling pit where it is further clarified and chlorinated if required before being automatically discharged by way of electric pump to the designated area.

Settled humus tank sludge is automatically returned to the inlet of the SCA tank by means of a vortex lift pump, which in turn is driven by the main SCA delivery pump. Effluent and sludge particles are also recirculated through the primary sewage tank by means of a 12mm diameter, by-pass feed line from the main SCA delivery pump. This has a threefold purpose:

(A) Excess sludge is returned to the primary sewage tank for storage and digestion.

(B) Clean effluent is recycled through the plant which tends to suppress the activities of micro-organisms which emit odours.

(C) By regularly recycling effluent, the circulating and fixed biomass in the SCA tank is being fed with stored organics from the primary sewage tank. This keeps the micro-organisms at maximum population levels and reduces the problems of treatment plants not used for extended periods, e.g. vacations. Consequently, untreated effluent is prevented from being discharged from the unit when persons return from vacation, or the treatment plant has been disabled from an extended power failure.



How is a fault detected:

You will become aware of a fault by a blue flashing beacon and also an audible alarm in the control panel. The alarm protects the plant from damage and alerts you to fault;

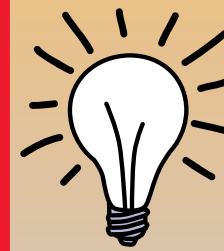
Why a fault will occur:

When a fault occurs it could be one of the following possibilities

- an interruption to electricity supply,
- a sudden power surge
- a pump failure through blockage or wear.

What to do next:

1. Turn off the switch marked – Alarm Mute – this will silence the alarm but blue light will still be lit.
2. Check that all the trip switches along the panel are in the “up” position. If not, switch all to the up position and restart the system by turning down and then up the Mains Switch
3. Should the alarm system be reactivated telephone your serviceman or Shay Murtagh Ltd. on 044 74108 or 1850 200034 for advice or a service call.



DO NOT INTERFERE WITH THE TREATMENT PLANT

WARNING

Your treatment plant has been designed to treat all household waste water.

DO NOT place the following items in the toilet:

Sanitary napkins, tampons and their wrappers, paper nappies and liners, condoms, cigarette packets and the like. These items should be placed in suitable wrapping and disposed of with rubbish.

For the same reason we advise against toilet cleaners/deodorants to be fitted to the toilet bowl. **FAILURE TO OBSERVE THESE BASIC REQUIREMENTS WILL SUBSEQUENTLY CAUSE BLOCKAGE TO THE PUMPS AND NECESSITATE A SERVICE CHARGE.**

Please note that maintenance does not include the replacement or repair of any mechanical, electrical or civil items outside the one year warranty period.

Cleaning agents are amazing cocktails of chemicals. Many detergents are not readily biodegradable and may inhibit bacterial action in the treatment plant, as well as polluting the water cycle long after use.

All nappy soaking products are anti-bacterial. If these products are to be used for soaking, ensure the wash water does not enter the system.

DO NOT allow wash water to enter the system if using strong bleaches.

DO NOT tip leftover paint, paint cleaners or other chemicals into the system. Do not discharge spa pools containing chlorine through the treatment plant.

DO NOT allow the treatment plant to become inaccessible by undergrowth,

DO NOT exceed the design parameters of the treatment plant according to the original specification.

DO NOT turn off the alarm switch. If alarm switch is turned off, fault must be attended to immediately.

DO NOT turn off the treatment plant to save power.

DO NOT leave control panel and pump cover open to weather.



Stop & Think!

Hints and Recommendations

Look for gentle biodegradable products AND READ THE LABEL - remember that pure soap flakes are 100% biodegradable.

Excellent biodegradable products are available to supermarkets, health food shops and speciality outlets.

Do not use excess cleaners or detergents - give cleaning products more time to work - use better cleaning tools, e.g. long handled scrubbing brushes.

Machine washing-use gentle biodegradable products. Pure soap flakes may also be used, firstly dissolved in very hot water before adding to the washing water. Soap residue or scum is a result of water hardness and is easily dealt with by adding quarter-cup of washing soda to the washing cycle

(NOTE:- WASHING SODA IS TOXIC IF SWALLOWED, SO KEEP OUT OF REACH OF CHILDREN OR PETS).

Toilet - Vinegar (purchased cheaply from your supermarket) is an excellent toilet bowl cleaner and will not affect the bacteria level essential for the operation of the treatment plant. Leave to soak for ten minutes, after which limescale can be scrubbed off.

Bath - Clean the bath with a recommended biodegradable product, it is recommended the plug be inserted in the bath and most of the cleaning product used wiped out with paper towels which should be disposed of in the rubbish bin.