



AC Environmental Products (Pty) Ltd provides advanced “Green” chemical treatment technologies and practical solutions to resolve complex pollution problems.

GREASE TRAP DOSING SYSTEM

Our electronic chemical dosing system, dispenses a pre-determined amount of organic chemical using a timed peristaltic pump. This has taken years of research and development together with numerous field trials to perfect the system.

The success of the system can be attributed to a proprietary formula of specifically blended extracts of non-endangered plant and vegetable oils, referred to as colloidal science. This chemistry has the unique ability to emulsify and break down the molecular structure of Fats, Oils and Grease commonly known as “FOG”. Our technology delves into quantum physics and enters into the specialised world of nano-technology. In a nutshell our chemical emulsifies FOG that is created in commercial food establishments. The nano-particles will break down the FOG at molecular level. The molecular nano-particles are encapsulated in a colloidal solution resulting in a change of the FOG molecules electrical charge thus preventing the matrix from congealing or adhering to any surfaces. The emulsified matrix will be digested unabatedly by naturally occurring microbes throughout the sewer pipes, thereby reducing blockages to the effluent plant.

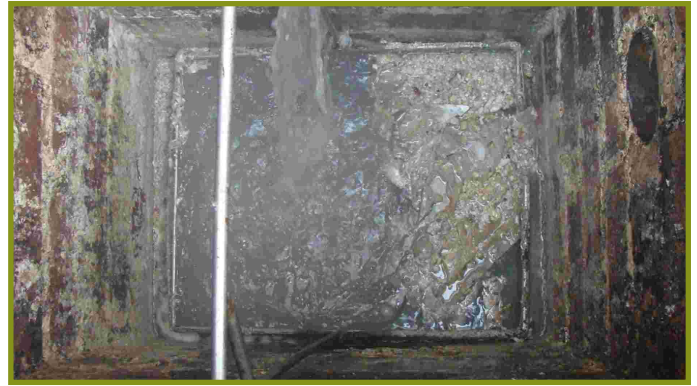
Traditional treatments for keeping the grease traps free flowing have limited success and should be mentioned to better understand why our solution is the most environmentally sound and at the same time cost effective.

The most common procedure is to pour harsh, corrosive chemical cleaning products down the drain to clear unwanted obstructions. The process in no way guarantees solving the problem! Furthermore it is dangerous to both the user and the environment in as much as it is damaging to existing plumbing, drain lines, drainage installations and it kills the essential microbes.

Other technologies introduce synthetic genetically modified microbes into the grease trap with the expectation that they will enhance the process of digesting the FOG. Throughout the world, the scientific community is in agreement that there are no man-made microbes that are more effective than the naturally occurring ones that digest hydrocarbons or FOG's. Often this technology requires the ‘microbe solution’ to be introduced as a last task before closing for the day. This is very important as it ensures that there is no further introduction of FOG. The process places immense time constraints and pressure on the system to break down the FOG and relieve the odour levels before opening the kitchen the next day. Problems arise when certain cleaning chemicals are used, as they will kill or stunt the microbes thereby negatively affecting the system well before it has a chance to work.

BEFORE

AFTER 3 WEEKS



In contrast to the aforementioned, our system doses a predetermined volume of chemical, in-line, to the waste pipes every 30 minutes. The result is that there is no stress on the system as it operates continuously.

Benefits:

- Reduce the Biological Oxygen Demand (BOD), Carbon Oxygen Demand (COD) and Total Suspended Solids (TSS)
- Reduced maintenance work as the system has less stress and less odour problems.
- No Health, Safety & Environmental (HSE) risk as the chemical is 100% biodegradable in 27 days, contains no ammonia, acids or solvents.
- The emulsified FOG is broken down at molecular level, encapsulated in the nano-particles, where naturally occurring microbes convert the FOG into organics, nitrates, carbon dioxide and water, thus they easily digested.
- No removal and cartage of congealed FOG to special land fill sites.

Recommended Procedures:

- Have the grease trap emptied and cleaned prior to installation and treatment.
- Seeding: upon installation of the chemical dosing system, ACEP staff will add the initial start-up dosage through your waste system.
- Dosing equipment and chemical will be installed, primed and activated.
- A further seeding will be added to the furthest drain in the establishment 8 to 10 days after installation.
- It is essential that any solid material such as cutlery, mop heads, plastic, etc. be removed from trap regularly.

Grease trap dosing:

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| • Small | 400-500 meals p/day | 816 ml per day |
| • Medium | 501- 1500 meals p/day | 1632 ml per day |
| • Large | > 1501 meals p/day | 3264 ml per day |

Installation of an air pump and diffuser system may be required.

Packaging:

Chemicals are supplied in 25 and 100 L drums



For any further technical information please contact the sales team at AC Environmental Products (Pty) Ltd
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