

Grease Reduction System



Grease Problems Were Unavoidable...Until Now!

Grease build-up in sewer collection systems, drain lines, grease traps, lagoon systems and leach fields has always been a problem for wastewater professionals. Grease deposits have traditionally been removed mechanically, or with enzymes or degreasers. While effective, these methods all have drawbacks. Mechanical removal is both expensive and labor intensive. Enzymes have generally proven too expensive to be used at effective doses. And while degreasers remove the deposits from the treatment site, the grease simply resolidifies at a point further downstream.

The Breakthrough: Patented "Bacterial Activation" Technology

Application	Expected Results
Lift Station	Grease mat and accumulation on side walls reduced or eliminated. Pumping and required maintenance reduced dramatically
Force Main	Eliminate scum layer on pipe wall. Reduces odors by eliminating preferred habitat of sulfide-producing bacteria.
Grease Trap	Reduces required pumping by 50 to 75%. Accomplishes grease reduction without increasing trap effluent BOD.
Activated Sludge	Improves settling in plants with high levels of grease or surfactant in raw influent. Minimizes grease build up around clarifier well.
Trickling Filter	Reduces film blinding due to grease build up. Restores oxygen transfer, reduces puddling, reduces odors, and improves BOD removal.

Grease reduction in wastewater treatment requires high rate production of grease and fat breaking enzymes known as lipases. While lipase is formed by a variety of bacteria, rapid production of lipase only occurs when the bacteria are "starved" of soluble food. Of course, "starvation" conditions are not encountered in collection system raw sewage or in

grease trap water. Therefore, without GES products in use, grease build-up proceeds at a rapid rate whenever a grease load is applied to the system.

The patented GES "Bacterial Activation" process supplies grease-breaking enzymes at a rate not seen in raw sewage. The ABI Delivery System subject the bacteria to aerobic starvation conditions before they are added to the lift station or grease trap. The bacteria are producing lipase at a maximum rate before they are added. This allows the bacteria to break down grease and fat accumulations that would otherwise require mechanical cleaning or harsh chemical treatment. The GES solution is the best technology available for safely, economically, and effectively solving grease problems.

Product Application Guidelines	
GelPac G with ABI Delivery System	Best for grease traps, collection system use, small sewage treatment plants. Requires enclosed area, electricity, and water. Product added weekly or monthly.
LLMO G-1 with ABI Delivery System	Used in sewage treatment plants of about 1 MGD or larger. Requires enclosed area, electricity, and water. Products added daily.
GelPac LS	Used when electricity and water are not available. Attached tether secures slow-release GelPac LS in wet well. Replace every 30 days with fresh product.