

The Flout® Dosing Device

A DEVICE FOR GRAVITY DOSING OF EFFLUENT OR STORMWATER

WHY DOSE?

The advantages of dosing effluent or storm water to the disposal areas are well known. The flooding action of the dose delivers effluent evenly to the disposal area and the subsequent resting allows oxygen to reach and help digest the biological mat, which may form and reduce the effectiveness of the disposal area. Dosing also aids as a counter to “creeping failure” which is common when effluent constantly trickles into a disposal field of a standard gravity system and preferentially loads the upstream end of the system.

TRADITIONAL DOSING METHODS

Traditional dosing systems may employ siphons, pumps, or other devices. Siphons are primed on installation and should thereafter operate continuously, however, should one dry out, operation may not automatically resume. Some siphons may go into trickle mode and then fail to dose. This problem can be difficult to diagnose. Pumps are the only option when dosing to a high elevation, but energy can be saved and pumps can be avoided on a downslope system.

THE FLOUT®

Flout is a contraction of the name Floating Outlet®. Rissy Plastics of Connecticut USA has pioneered the technology since 1992 and the original test installation is still working perfectly. Thousands of Flout® installations are currently at work in North America, Europe, South Africa, New Zealand and the Pacific Islands.



Standard Flout

HOW IT WORKS

A chamber of sufficient dimensions to retain the required dose has an upper inlet and lower outlet, usually at floor level. The outlet diameter is usually 80mm but there are other options. A box shaped vessel floats on the surface of the liquid that enters

the chamber. There is an opening in the upper side of the vessel and a ballast weight is attached. A length of pipe extends into the vessel through the side and attaches to a special flexible connector the same diameter as the pipe. The other end of the connector is connected to the outlet, usually via a T fitting with a vent extending above the maximum liquid level.

The flexible connector acts as a hinge, allowing the vessel to float ever higher as the chamber fills. When the vessel can float no higher, liquid spills into the vessel, forcing it to sink to the floor, allowing liquid to flow through the outlet. When the liquid level in the chamber drops to the top of the vessel, flow stops and the vessel drains and refloats in the remaining liquid.

Multiple flouts can provide individual outlets for each section of the disposal area or can be combined for larger flow rates. The Flout® is a proven method of dosing effluent or storm water to the disposal area. It is simple to install and works without power. In the rare event of problem, it is easily diagnosed and rectified. It is inexpensive and long lasting. A Flout® never needs to be primed.



Flout Chamber

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