

Landfill Services



....leachate
treatment



....and gas management

Landfill Lining

FLI Environmental has worked at the forefront of landfill lining installation in Ireland and across Europe for over twenty years. Our customers benefit from this depth of experience in areas such as installation quality; material selection; resource availability and design advice. FLI endeavours to work in partnership with its customers to deliver projects safely, on time and on budget.



Leachate Treatment

Submerged Aerated Filter - HSAF®

Submerged Aerated Filters are a well proven technology for treating wastewaters and leachates. The Brightwater F.L.I. HSAF® unique design provides a versatile static bed process using the BMax® floating media with periodic cleaning cycles that offer the following system advantages:

- **High quality effluent** (For example the HSAF® can achieve 1mg/l ammonia in tertiary mode)
- **Small footprint** (The HSAF® uses Bmax® media which provides a high specific surface area (700m²/m³). This combined with the high oxygen transfer efficiency achieved by the process air system results in a high intensity process with a small footprint.
- **No sludge build-up** (Automated cleaning cycle periodically removes excess sludge whilst independently maintaining sludge age)
- **Low power usage** (The high efficiency of the process air system ensures a low air and power requirement)
- **User Friendly** (Proven, simple & robust process requires virtually no maintenance during normal operation)



HSAF® units operational on site

The Brightwater F.L.I. HSAF® is a biological process unit designed to enable BOD and / or ammonia reduction. In most applications the flow is pumped to the unit. The flow passes up through the aerated biological treatment zone of BMax® media where the active bacterial population metabolises the effluent to reduce the ammonia and / or the overall Biological Oxygen Demand (BOD). The air for the biological treatment is evenly distributed through each reactor by passing through a process air grid located at the base of the aerated biological treatment zone.

Gas Management

FLI Environmental offers a comprehensive service in the provision of landfill gas management. The range of this service encompasses:

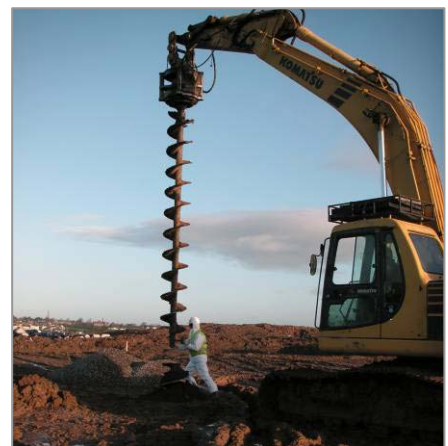
- geomembrane capping,
- leachate and gas well installation,
- collection pipe work (manifolds & knock out pots)
- pumping trial and flare assembly selection



Landfill Gas Manifold



Landfill Gas Flare



Gas Well drilling at Kilbarry Landfill site, Waterford

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