## BIOCEPTOR

## Victoria Falls restaurant embraces eco-friendly grease management

The Lookout Café provides customers with breathtaking views, delectable dishes, and also alluring aromas—thanks to its vibrant menu and now environmentallyfriendly and effective grease management in place: **BioCeptor, GreasePak,** and **BioBrick** by Mechline.

In 2024 Mike Dooge of ACMS (Material Suppliers and Water Engineering Services) reached out to Mechline as he had seen numerous testimonies of how effective bacterial dosing was for managing and eradicating problems caused by FOGS (Fats, Oils, Grease & Starches). Mike was intrigued and looking to try a new approach that was environmentally-friendly, effective, would work in harmony with the local area, and reduce the amount of organic waste.

Many kitchen operations across Southern Africa face unpleasant smells, blocked drains, high labour requirements, and, ultimately, ineffective grease traps and design. In Victoria Falls there is also human-wildlife conflict because wildlife can access the mixed waste that ends up at landfill.

Mechline introduced ACMS to its combined technology system **BioCeptor**—which traps and treats FOGS—who in turn introduced this to Claire Mollatt of Kuvandudza Pvt Ltd (Providers of Eco-supplies and Solutions). Together ACMS and Kuvandudza were keen to undertake trials to test BioCeptor's effectiveness. One of these trials was at The Lookout Café.

The Lookout Café (part of Wild Horizons Group) in Zimbabwe is an iconic restaurant situated downstream of the spectacular, UNESCO-listed, Victoria Falls and can serve up to 800 covers in peak season. Its flavourful menu is a mix of traditional and local dishes, with a varied selection of grilled meats, pastas, noodles, salads, wraps, luxurious desserts and more—





View from The Lookout Cafe, Victoria Falls. Photo Courtesy of Management.

food that naturally results in FOGS waste discharge to drains! To manage this, The Lookout already had two traditional passive grease traps.

One was in the kitchen, from the pot wash sink, and the other under the main building deck, both leading to the lifting tank and pump. But with these came challenges: space was limited, the traps needed emptying often, and the ongoing odours produced was unacceptable, and sometimes detectable on the deck where customers sat. What's more, the secondary tank and lifting station are perched on the edge of the gorge, 110m up, so emptying is not an easy or pleasant task.

## The Trial

The agreed course of action was to replace the internal grease trap with a **BioCeptor** system (combined NSF certified trap with biological treatment) and to add bacterial treatment, via **BioBricks**, into the outside secondary tank for a trial period of 10 weeks, starting in October. A key factor in the decision to trial **BioCeptor**, **GreasePak** fluid and **BioBrick** was their natural and safe composition. Mechline's biological products are environmentallyfriendly and compatible. They achieve results with the use of naturally occurring bacteria, and importantly, without the use of harsh chemicals. The Lookout also switched to biological cleaning products to help the effectiveness of the system.

## The Results

**Odours.** Within a few days, there were no longer any unpleasant smells detectable in the kitchen, or outside. In fact, it was described as "non-existent" and positive changes were reported immediately from the start of the trial. In the kitchen, the dishwashing staff were also extremely happy as they reported a total eradication of nasty smells.

**Grease Removal.** Before **BioCeptor** was installed staff reported that they needed to remove approximately 200kg of solid grease per week—or 4 dustbins worth—through daily intervention! After installation, floating organics and silt were removed from the traps, but the load was significantly reduced to a minimum manageable level that required little involvement throughout the trial period. The complete system of the **GreasePak** fluid, **BioCeptor** tank and **BioBrick** reduced the FOGS and organics build-up by more than 75%!

**Sustainability.** With **BioCeptor** and **BioBrick** working well, the site has been able to reduce its use of cleaning chemicals, meaning there are less pollutants, as well as FOGS, entering the wastewater system. Together with a reduction in waste collections, and the use of locally sourced probiotic cleaners, The Lookout Café is reducing its carbon footprint.

**Cost.** The site reported a significant saving in time and labour with the new **BioCeptor** and **BioBricks** solution. Less waste to handle, and significant reductions in operational costs, labour, external contractors and the use of chemicals.

**Overall.** The Lookout team has seen significant cost reductions, and no more smells. Staff are pleased as they have more time to carry out dedicated foodservice duties, and the complete system has created a much better and cleaner working environment for everyone, as Jono Baker, Manager at The Lookout Café, explains:

"I am over the moon with the effectiveness of **BioCeptor**, **GreasePak** and the **BioBricks**. They have completely transformed our operations. So simple. We have to do nothing, compared to previously. It's so simple and clean."

Claire Mollatt, the Ecologist working as part of the Kuvandudza team, is also delighted with the effectiveness and environmentally-friendly nature of Mechline's products:

"Knowing that the types and concentrations of bacteria in the Mechline MSGD (Multi Strain Grease Degrader) bio-fluid and **BioBricks** are not invasive and that they are safe for our waterways, as well as probiotic, is a game changer for the hospitality sector here and elsewhere in Zimbabwe.

"I am over the moon with the effectiveness of BioCeptor, GreasePak and the BioBricks. They have completely transformed our operations. So simple. We have to do nothing, compared to previously. It's so simple and clean."

Jono Baker, Manager at The Lookout Café

BioCeptor is a combined *trap and treat* grease management system. BioCeptor's tank traps FOGS, to remove it from the kitchen wastewater. It prevents FOGS going down the drain, and potentially causing costly problems. The tank has been tested and certified to ASME A112.14.3 and PDI G-101 and it is highly efficient at trapping Fats, Oils and Grease, with an average efficiency rating of 95.6%\*.

The BioCeptor tank then cleverly works in conjunction with **GreasePak** bio-fluid, which uses specially selected, naturally-occurring bacteria, to permanently degrade and break down the collected FOGS. As a result, there is less FOGS waste to deal with and fewer waste collections.

**BioBrick** is a controlled release system containing a specially selected blend of non-toxic natural microbes which digest FOGS. Perfect for low oxygen conditions like wet wells and grease traps!

"The importance of regenerative waste management practices and not simply 'going green' are very easy to see in the very sensitive ecosystem of the Batoka Gorge of the Zambezi River, where The Lookout is located.

"By using the GreasePak and BioCeptor, The Lookout is taking some significant positive steps towards minimising the environmental impact of their solid waste and wastewater."

With a final word from Mike Dooge, ACMS:

"We are delighted that we contacted Mechline. They have been very professional in all their help and support. And, everything that they said would happen, has and did! The bioremediation and bacteria systems are incredibly effective and offer fantastic value for money. The client is delighted and sharing the experience everywhere.

"A special mention also goes to the wider Kuvandudza team: Panas Zvavodza, who was instrumental in the installation and ongoing post-sales service; and Cailean Dooge, Paula Dooge and Storm Brebner, who were integral behind the scenes and with logistics."





For more information on products from Mechline Developments Ltd, contact us on: +44 (0) 1908 261511 | info@mechline.com | www.mechline.com

\*For more information on BioCeptor's Independent Testing & Field Trials: https://www.mechline.com/wp-content/uploads/2020/03/BioCeptor-Success-Story\_-Testing-Field-Trials.pdf