

Case Study 1. High security, multi-site, with 36 food service establishments, with on-site commercial catering facilities

Situation

The Client faced serious problems from wastewater discharges that were continuously causing issues to the internal and external waste water infrastructure. These issues were caused by a complete lack of management of food waste, Fats Oils & Grease (FOG). A total of 36 food service establishments across the site were causing repeated sewer blockages and reported pollutions. This site was incurring huge costs annual dealing with these issues, in addition it was in real danger of facing the threat of legal prosecution from the Water Utility receiving the waste stream. Other issues directly linked to this contract included pest infestation, installation of improper equipment that was not fit for purpose and poor food hygiene and waste management practices. The impact of these issues caused disruption to day to day operations with income generating services being temporarily shut down, incurring avoidable costs from remedial actions to address emergency problems. Directly harming the sewer networks as well as creating a nuisance to third party operators, consumers and the general public. Coming under scrutiny, the Client faced serious damage to its reputation and ECAS was contracted to provide a suitable environmental solution to bring the issues under control.

Task

The project plan was set up with our client, to tackle the sewer network problems from a wide range of perspectives taking into account the high level of stakeholder engagement. Establishing a communications plan, resource plan and programme of work enabled the project to run smoothly. Regular monitoring and quantifiable progress reporting were fully integrated throughout each phase of the project. The programme focused on the reduction of blockages, flooding's and pollutions from entering the public sewer network. FOG Prevention was specified as being a prerequisite of the planning process, and the law. Our Mandate included the writing and managing of discharge limits through the provision of permits, lease agreements/contracts with all the food service establishments (FSE's) on behalf of our clients. There are a number of statutes and legislation which require compliance, from all stakeholders' for example:

The UK Water Industry Act 1991; Building Regulations; The Environmental Protection Act 1990; Food Hygiene Regulations;

Action

ECAS adopted a holistic approach to getting to the root cause of all issues addressed in the project. With our expertise and extensive experience, we were engaged by our client to provide high quality sustainable environmental services to all the food service establishments and to assist them with the growing pressure being put on them by the Water & Sewerage Service Companies (WASC) through the enforcement of the Water Pollution Act 1991. The Water Act covers the discharges to the sewer of Fats Oils and Grease (FOG) and food waste.

To reduce the number of FOG related incidents caused by commercial customers

- Our team developed specified methods for reducing FOG and food waste discharges specifically tailored to each FSE
- Waste to Energy project feasibility Study
- Provided our client with a customer education and awareness campaigns

Results

The results of the project were measured from a wide range of financial and non-financial perspectives:

Cost Benefit

Tangible Savings

- Reduction in cost of blockages £65,000
- Reduction in penalties for legal breaches £98,000

Circa. 100 tonnes of FOG and food waste was sent for anaerobic digestion.

- Oversaw the installation and monitoring of properly sized grease trapping equipment
- Trained FSEs in BMPs and advised on proper collection and disposal of FOG and food waste
- Inspected FSEs for compliance and educated FSE owners and staff continuously on best management practices (BMPs)
- Tracked and recorded the collection and disposal of all waste FOG being generated by each FSE
- Our Client has saved thousands of pounds annually thanks to reductions in sewer blockage and pollution incidents
- Created with our clients an environmental award Scheme that rewarded FSEs who participated in all areas of the programme.

All Food Service Establishments were compliant within four months, this guideline was agreed with the client.

Legal Benefit

Legally compliant to statutory and regulatory requirements, gaining the visibility to generate fact based environmental reports on compliance and performance.

Levels of non-compliance reduced from 36 to 0 this Prevented tonnes of waste oil going to the public sewer, the savings were reinvested back into their CSR programme

Environmental Benefit

Significant reduction in negative impacts on the environment arising from the implementation of a highly effective environmental programme and the establishment of best practices across the site.

The cost savings to date have achieved £163,000 this is a continual process that is on-going.

Health and Safety Gains

80% reduction in reported accidents from slips, trips and falls arising from the training and awareness in the importance of adhering to established hygiene practices and monitoring.

Staffing and Customer Benefits

- ECAS developed and modify work processes for all grease trapping equipment.
- Developed and implemented safe working procedures, thereby reducing the risk of accidents.
- Ensured that workers used appropriate personal protective uniforms and followed safe working procedures, this was perceived as added value by the Client.
- Customers attending the site were not met with bad odours, closed off entrances due to flooding's and had a feel good factor regarding their experiences.