



**Protecting our  
network from  
fats, oils and  
grease (FOG).**

# Protecting our network from fats, oils and grease (FOG).

The residual fats, oils and grease (FOG) from preparing, cooking and cleaning up food cause major problems for our business. When they reach our sewers, they combine with wet wipes and other unflushables to form fatbergs, which can damage our pipes, lead to blockages and sometimes cause flooding and pollution to homes, businesses and the environment. Our dedicated Network Protection Team visits food businesses in fatberg hotspots to investigate their current grease management and proactively engage with them about responsibly managing and disposing of waste FOG to help reduce blockages and flooding.

## The FOG problem.

With 15 million customers and over 43,000 food businesses within our area, significant amounts of FOG is being washed down the drains. Once it's in our sewers, FOG can form hard deposits and block part, or all, of the pipes. In September 2017, our engineers started a nine-week battle to remove the infamous Whitechapel fatberg, one of the largest ever found. This rock-solid mass of wet wipes, nappies, fat and oil weighed a staggering 130 tonnes!

FOG blockages can directly affect businesses like restaurants, with a wide range of impacts:

- Sewage backing up and flooding the business.
- Being forced to close while a blockage is cleared.
- Loss of sales and reputational damage due to environmental damage.
- Rodents attracted because of bad smells.
- Road closures creating disruption for customers.

We've found that many of our customers don't know about the problem they're causing when FOG is washed down the drain. Most are also unaware of equipment that can be installed in commercial kitchens to reduce the amount of FOG entering our sewers.

- **Customers located within 50 metres of one food business are five times more likely to be flooded with sewage...**
- **... while customers located within 50 metres of two or more food businesses are eight times more likely to be flooded.**



**FOG blocking our sewer pipes which can lead to flooding and pollution to homes, businesses and the environment.**

## What we do.

There's a clear link between our fatberg hotspots and high concentrations of food outlets. Our initial findings indicated that 90 per cent of food businesses did not have appropriate grease management in place.

Using sewer blockage data, our Network Protection Team identifies target areas in our region, and visits the food outlets in these fatberg hotspots to investigate their current grease management and inform them about responsibly disposing of waste FOG to help reduce blockages and flooding.

During the visits, food outlet owners and managers are provided with leaflets and posters explaining how they can dispose of FOG safely. We also remind them of their legal obligations to avoid putting the wrong things down the drain. Under section 111 of the Water Industry Act 1991, the law states that it's an offence to discharge anything into a sewer which may interfere with it flowing freely.

Our approach is to inform and educate businesses to help tackle sewer misuse to reduce blockages, sewer flooding and pollution. Over three visits, we take our food outlet customers on a journey to encourage them improve their grease management practices to control the discharge of FOG. If this is unsuccessful, we'll consider cost recovery and prosecution in extreme cases as a last resort.

### Grease management equipment.

Installing and maintaining grease management equipment properly will reduce the likelihood of our customers being affected by problems caused by FOG. Some easy solutions include:

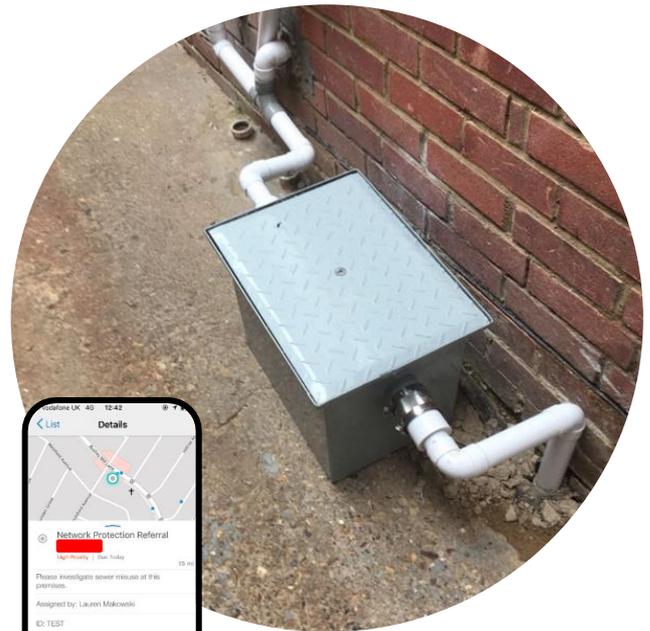
- **Grease removal units** - fitted to kitchen appliances like sinks and work stations. They use heat and electricity to remove FOG from wastewater and keep it in a container to be emptied.
- **Grease separators** - placed in drain pipes, allowing the FOG to float to the top, separating it from the wastewater. They must be cleaned out manually on a regular basis.

### Our wider engagement.

Kitchens are found in a wide variety of premises such as restaurants, takeaway cafés, hospitals, schools and work canteens. As well as face to face visits to individual food outlet owners and managers, we also engage directly with large businesses and institutions in order to encourage change across entire estates.



Leaflets and posters explaining how to dispose of FOG safely.



Grease separator installed at a food outlet and our mobile app to refer cases of sewer misuse.

### Smarter working.

Real-time cases of sewer misuse are reported to our team through an internal referral system, and are managed through the use of a mobile app and GIS. This way, we can easily identify customers who may need more engagement and help.

### What are the benefits?

Our proactive strategy has helped us to build relationships and educate our customers about FOG. We've seen numerous benefits at a local level, with fewer repeat blockages in areas where grease management systems have been installed and maintained.

### Future developments.

Building on our Network Protection Team's success, we've tripled the size of the team to 12 people. This means the team can now visit and engage with over 4,000 premises each year.

Proactive engagement is our preferred approach, but we'll still take enforcement action if these visits don't produce positive outcomes. Expanding our team will also help us tackle other forms of sewer abuse like wet wipes and clinical waste.

