

## RESEARCH SUMMARY

Janice Blanc and Scott Arthur July 2013

# Management and Recovery of Sewer FOG (fats, oils and greases)

### Introduction

There are approximately 200,000 sewer blockages throughout the UK every year. It is estimated that around 75% are caused by FOG. This has an economic impact on the responsible water authorities which will ultimately be reflected in increased prices for customers. This research outlines the current state of knowledge regarding best practice for FOG management at UK and international level. In addition, opportunities for reuse of recovered FOG are explored.



## **Key Points**

Both residential and commercial properties contribute significantly to FOG in the waste water system. Case studies show that an active programme of education, licensing, inspection and enforcement can result in significant reductions in FOG related blockage and sewer overflows. In addition the research demonstrated that while fats, oils and greases in the waste water system are a major problem, there is an opportunity to recover these materials and use them beneficially in processes that will improve both the environment and the efficiency of waste water treatment. Key to this is educating and encouraging communities and businesses to think of fats, oil and grease as a valuable commodity rather than waste.

#### Research Undertaken

A desk based study of available literature relating to fats, oils and grease deposition and recovery formed the basis of the research. The main sources of information were academic publications and trade journals. This was supplemented with information from water authorities, sewerage providers, technology companies and government bodies. Information was also drawn from social media outlets. A number of case studies were used to illustrate different approaches for fats, oils and grease management currently being used.

## **Policy Implications**

The research has highlighted that sewerage providers cannot be expect to manage FOG alone. Where FOG has been dealt with effectively it has been through partnerships with sewerage providers, local authorities, technology companies, business and householders.

#### **Research Team and Contacts**

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