

Water UK – Our view on Food Waste Disposal Units: For or Against

When it comes to the use of our wastewater infrastructure United Utilities follows the principle that “Sewers are for Sewage”. Water UK’s opinion is that macerated food waste from food waste disposal units (FWDU) is not sewage, our sewers were never intended for or designed for food waste.

Therefore Water UK does not recommend the use of FWDU’s in any situation; domestic or commercial.

There are three main reasons that have led us to this opinion:

Sewerage Network Issues – Water Companies already deal with approximately 300,000 sewer blockages every year, costing the country over £100 million – money which could be taken off bills or spent on improving services. In addition to the blockages that Water Companies deal with there are many hundreds of thousands more that occur in the drains that householders are responsible for. The use of FWDU’s would lead to an increase in the number of sewer blockages due to the high levels of chopped up food particles that discharges contain. There would also be a higher risk of pollution due to small particle size that food waste gets chopped into – these small particles would pass through the screens on our Combined Sewer Overflows, in heavy rainfall conditions and enter local rivers and streams.

If FWDU’s were allowed they would cause an increase in the amount of Fats, Oils and Grease (FOG) that is discharged into sewers. FOG causes lots of the sewer blockages we have to clear each year and in some cases it can cause “Fatbergs”.

When we clear sewer blockages we remove a lot of the material that forms those blockages. Blockages commonly contain wipes, period products, and FOG and when we remove this material it has to be sent to specialist landfill sites.

Domestically produced FOG could be disposed of through existing local authority kerb-side collections (domestic bins) where it is recycled to produce energy. This partly cancels out the argument that FWDU’s reduce waste to landfill.

Research¹ has shown that kerb-side collection of segregated domestic kitchen food waste has lower greenhouse gas emissions and overall financial costs when compared with the use of domestic FWD units followed by discharge to sewer. The comparison assumes no increase in blockages and both routes used a thermal hydrolysis process followed by anaerobic digestion, with energy recovery and bio-solids reuse.

1 National Food Waste Programme (Work Package 1.1) Comparison of the Sustainability of Food Waste Disposal Options WRC/UKWIR

Wastewater Treatment Issues – Widespread use of FWD's would be increased costs to Water Companies due to the increased biological load that macerated food waste causes at the Wastewater Treatment works. This would lead to increased energy consumption required to treat this load so that our treated wastewater can be safely returned to the water environment. In these times when we are all trying to do what we can to reduce our carbon footprint this would be most unhelpful.

Water Use – FWDU's tend to use just over 12 litres of tap water to dispose of 1kg of food waste. As 1 litre of water weighs 1kg, this means that over 12 times as much treated water is used than the food waste and 1kg of food waste therefore becomes 13 litres (13kg) of wastewater. Where FWDU are installed in homes, water usage increases by between 3 and 4.5 litres per person per day. Again as we try to reduce our carbon footprints and use only the tap water that we actually need this is unhelpful.

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