CLAIMS

1. A FOG (Fats, Oil and Grease) system including:

a reservoir defining an effluent containing zone; and

a FOG collector provided in the reservoir in the effluent containing zone, the FOG collector ~~which includes~~including:

a plurality of floating members which are configured operatively to float in ~~an~~ the effluent containing zone;

a plurality of heaters ~~heating arrangements~~ configured to warm effluent in the effluent containing zone, thereby liquifying, at least partially, FOG in the effluent, wherein the floating members and heaters ~~heating arrangements~~ are arranged in a plurality of groups, each group including at least one of the floating members coupled to at least one of the heaters~~heating arrangements~~;

a collecting arrangement configured to draw in at least some of the warmed effluent including the liquified FOG out of the effluent containing zone for further treatment, processing and/or separation, wherein the collecting arrangement includes a weir or overflow arrangement to draw in the liquified FOG from the effluent containing zone; and

a fluid inlet configured to direct fluid towards the collecting arrangement, wherein the fluid inlet is configured to receive warm fluid and direct the warm fluid around the collecting arrangement, thereby simultaneously to warm the effluent and liquify the FOG further and to clean or flush the collecting arrangement.

2. The FOG system ~~collector~~ as claimed in claim 1, in which the collecting arrangement includes a funnel having an upper lip, wherein the upper lip of the funnel serves as the weir or overflow arrangement and the funnel directs the liquified FOG towards an outlet.

3. The FOG system ~~collector~~ as claimed in claim 1, which includes at least one mechanical filter.

4. The FOG system ~~collector~~ as claimed in claim 3, which includes a plurality of mechanical filters.

5. The FOG system ~~collector~~ as claimed in claim 4, which includes at least two mechanical filters of different grades comprising a courser filter and a finer filter arranged sequentially.

6. The FOG system ~~collector~~ as claimed in claim 3, which includes a mechanical filter in the form of an outer mesh enclosure around the floating members, the heaters~~heating arrangements~~, and the collecting arrangement.

7. The FOG system ~~collector~~ as claimed in claim 3, which includes an inner mechanical filter in the form of a mesh or perforated wall or rim around the collecting arrangement.

8. The FOG system ~~collector~~ as claimed in claim 7, in which the fluid inlet is directed outwardly towards the ~~inner mechanical filter~~mesh wall.

9. The FOG system ~~collector~~ as claimed in claims 1, which includes a support arrangement to support the floating members relative to the collecting arrangement.

10. The FOG system ~~collector~~ as claimed in claim 9, in which the support arrangement is in the form of an adjustable bracket, thereby to adjust a spatial relationship of the floating members relative to the collecting arrangement.

11. The FOG system ~~collector~~ as claimed in claim 1, in which, in each group, the heater ~~heating arrangement~~ is supported by, and projects operatively downwardly from, the floating member.

12. The FOG system ~~collector~~ as claimed in claim 1, which has no moving parts.

~~**13.** A FOG treatment system comprising:~~

~~a reservoir defining an effluent containing zone; and~~

~~the FOG collector as claimed in any one of claims 1-12 provided in the reservoir in the effluent containing zone.~~

~~14~~13. The FOG ~~treatment~~ system as claimed in claim 1~~3~~, which is a FOG treatment system and includes a FOG processor in fluid flow communication with the collecting arrangement.

~~15~~14. A method of collecting FOG using the FOG ~~collector~~ system as claimed in any one of claims 1-~~12~~13, the method including:

providing the FOG collector in the effluent containing zone, the plurality of ~~at least one~~ floating members causing the FOG collector to float;

activating the ~~at least one heating arrangement~~plurality of heaters thereby to warm effluent in the effluent containing zone and to liquify, at least partially, FOG in the effluent; and

drawing in the liquified FOG by the collecting arrangement out of the effluent containing zone for further treatment, processing and/or separation.