

GGL 2 Non-Technical Summary – GGL 2 Non-Technical Summary – GAP Group Limited - Dock Road, Tilbury, Thurrock, Essex, RM18 7EQ

1.0 Introduction

GAP Group Limited (known from now on as GAP) is the market leading national provider of portable toilets to the construction industry. As a by-product of providing portable toilets, they require



emptying regularly. This is facilitated by GAP's own fleet of tankers.

Example of tanker fleet and portable toilets

The companies Welfare Services division operate a number of depots across the country. GAP is the only national welfare provider offering towable welfare units, portable toilets and tanker services.

The company maintains and empties these toilets with its own tanker fleet collecting the portable toilets and septic tank waste.

The company is looking to utilise its network of depots to discharge the collected liquid waste to the foul sewer, with consent from the local wastewater provider. The tankers attach via a hose to a purpose built discharge point at the depot similar to those on sewage treatment works.

The collected waste liquid waste will be bulked up and stored on site to be discharged to the foul sewer in a controlled rate that the local water company requires to prevent overloading of the receiving works.

Due to the nature of the operation, the required environmental permit application will be a bespoke permit.

In other instances the tanker may discharge directly to the foul sewer via a purpose built discharge point again featuring a screen to prevent foreign objects entering the foul sewer.

2.0 Discharge and Screening process

When the waste is pumped from the tanker via the to the storage tank it will pass over a screen, which acts as a sieve. The screening process is there to prevent foreign objects entering the tank and the foul sewer.

The screen is manually cleared and items that are removed are placed into a bag and stored in a sealed skip on the site. The skip is then collected for recovery at another location.



Example of discharge point – better picture of hooked up tanker

2.1 Waste Acceptance

All waste will have gone through a pre-acceptance process with all waste being booked in before it can come to the site. All incoming waste must report to the site office; a completed waste transfer note must be provided to show the description and origin of the waste. The vehicle will then directed to the relevant area for discharge.

If there is a variation in the waste compared to its description this must be discussed with the site office. If the description requires changing this will be completed if it the waste can be accepted under the environmental permit. If not the waste will be reloaded and removed from site.

Any rejected loads, quarantined loads or loads where the description has changed from the original waste transfer note will be noted in the site diary.

If this is the case, the relevant mirror code will be assigned in line with Guidance on the classification and assessment of waste (1st Edition v1.2.GB) Technical Guidance WM3. All waste movements are recorded on the company's electronic system.

2.2 Waste treatment

Tankers arrive at site, report to the site office, and provide a description of the waste that has been collected. This should already be on file including the source and description of the waste.

The tanker drives onto the designated area for discharging which sits on an impermeable surface and part of a sealed drainage system.

The tanker will then couple up to the storage tank and discharge via pumping to the tank. A mesh filter is in place to remove larger solids and foreign bodies.

Once the liquid is stored within the tank, the liquid is ready to discharge to the foul sewer via a dedicated metered discharge point. A sample is taken as part of the process. If the process is to continue accepting the same waste stream, then the tanks will remain operational until the screen needs clearing or solids require removing. If a different waste stream is to be processed, the tanks are to be cleaned.

The discharge rate from the tanks is controlled to the rates required by the local water company as per the trade discharge consent.

3.0 Discharge and Screening process

The proposed on-site activities can be split into two distinct processes.

Direct tanker discharge to foul sewer

When the waste is pumped from the tanker via the purpose-built discharge point, it will pass over a grid, which acts as a screen. The screening process is there to prevent foreign objects entering the foul sewer.

The screen is manually cleared, and items that are removed are placed into a bag and stored in a sealed skip on the site. The skip is then collected for recovery at another location.

Treatment via dewatering

The second process is the dewatering of liquid and sludge wastes before the de-watered liquid is discharged to the foul sewer.

The transfer of the waste products between the two units allows for the settlement of the sludge, which in turn forms a cake within the dewatering container; any odours present will be contained in the filtrate arising from the dewatering process and should be plumbed through metering directly to a foul system or transferred to a sealed holding tank for re-use in other processes.

The treatment of liquids and sludge's will be via dewatering containers.



Once treated the suspended solids settle out allowing liquids free from suspended solids to be released to the foul sewer via a trade a discharge consent.



4.0 Tank Cleaning

When required the tanks can be cleansed to remove solids. When fouled, screens can be cleansed via jet washing from the inspection and access hatches on the top of all tanks (remain closed when in operation). Once the tanks are cleansed, they can be placed back into operation.

5.0 Sites and industries serviced

GAP service a variety of industries, however the main industries served by the Welfare Services division are those in the construction and infrastructure sectors who require the provision of temporary portable toilets.

4.0 Hazardous waste

GAP does not collect any hazardous waste such as oils and fuels and as a result, there will be no hazardous waste accepted at the proposed facility.

5.0 Tilbury Depot

The existing Tilbury GAP depot is well established and helps support GAP's welfare Services division as well as plant and vehicle hire.

The Tilbury depot is situated on the Wheatley Business Park and the site itself is flanked by a number of commercial companies.

It is of note that the site sits adjacent to the Wheatley Sewage Treatment Works run by Thames Water.

7.0 Wastes received and stored

The only waste to be received under the permit will be

16 10 02 – Portable Toilet Waste - aqueous liquid wastes other than those mentioned in 16 10 01
20 03 04 - septic tank sludge
20 03 06 - Waste from sewage cleaning

The maximum quantity of waste to be received within 1 week is 350 tonnes.

The maximum quantity of waste to be received within 1 year is 18,250 tonnes.

Note: A maximum of 50 tonnes per day are discharged to the foul sewer for disposal per day.

The maximum quantity of waste to be stored at any time is 100 tonnes. This will be 50 tonnes under normal operations, but can be increased to up to 100 tonnes for specific events and then discharged at a controlled rate as not to breach the 50 tonnes per day discharge limit.

8.0 Drainage

The whole operation including the transfer, storage and treatment of waste takes place on an impermeable surface as part of a sealed drainage system. The area is concreted with a curbed edge preventing any liquid being able to seep to ground. The area drains to foul sewer preventing any run off to surface water.

The site drainage is shown in the site drainage plan reference GGL 11.

9.0 Emissions and Fire

The only point source discharge for the operation is the treated effluent to the foul sewer. Due to the wetness of the waste and the process dust will not be produced, in addition, there is no crushing, mechanical screening, trommeling or compaction of the waste as a result no additional noise will be created. Vehicles are constantly moving in and out of the depot during hours of operation from both the Welfare Services division and other divisions of GAP.

By its nature the waste can be odorous and as a result an odour management plan will form part of the permit application.

The waste stream is not flammable and as a result a Fire Prevention Plan is not required.