

Foul water treatment

Adam's Activity Ark Day Centre

Hawkshaw Farm
Clayton le Dale
Blackburn
BB2 7JA

Foul water

Proposed Package Treatment Unit – Adam’s Activity Ark Day Centre

Adam’s Activity Ark offers daytime activities for small groups of adults with learning difficulties, mobility problems or mental health needs. They occupy two small buildings within the farm park with a neighbouring toilet block solely for use by visitors to these activities. Waste from this facilities building is treated through a Klargester Bio 4 plant suitable for 12 persons. (example shown below).

The activity centre restricts attendance to 12 attendees with 3 staff/volunteers.

The capacity of the package treatment unit was calculated using British Water Codes of Practice – Flows and Loads 4; Sizing Criteria, Treatment Capacity for Sewage Treatment Systems.

A school/office without a canteen will lead to the production of 50 litres waste/person/day (British Water flows and loads). The maximum number of attendees on any day is 15 (P)

Using this standard the following daily flow is calculated

$$\mathbf{P15 \times 50 \text{ litres} = 750 \text{ litres} = 0.75\text{m}^3/\text{day}}$$

The treatment plant outlet is directed into Tottering Brook to the south east of the farm park.

Package Treatment Unit

A package treatment unit is used to deal with sewage and foul water. The chosen system will be Certified to EN 12566 and compliant with Part H Building Regulations.

A Klargester BioAir 4 unit with a daily capacity of 1,800 litres (750 + 25%) is installed.

See details below.

The unit will be regularly serviced in accordance with the manufacturers recommendations and checked regularly to ensure they are working effectively.

The total outflow volume is less than 2m³/day and will meet the General Binding Rules and obviates the requirement for a discharge licence.

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Klargester BioAir 4

BioAir 4 Features:

- Suitable for shallow dig Installations
- Suitable for use in traffic areas (structural design advice required by others)
- Low level visibility
- Improved effluent quality – BOD5 97.5%
- Third party tested to EN 12566-3
- Easy to install and operate
- Supplied with isolator switch (High Level Alarm optional on IPS unit)
- Robust and Lightweight 3 years warranty* (terms apply)

BioAir Applications:

- Light Industrial Premises
- Small Offices
- Farms

BioAir	Model	BioAir 4
Population Equivalent	Unit	12
Daily Flow	m ³ /d	1.8
Daily Load	kg BOD ₅ /d	0.72
Measurements		
Outlet invert	mm	600-1600
Diameter	mm	1900
Length	mm	3240
Installation depth	mm	2250-2750
Inlet invert	mm	500-2000
Inlet pipe work*	mm	110
Outlet pipe work*	mm	110

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Material Construction	MDPE or GRP	GRP
Unit Weight	kg	500

