

Mr. Breen Higgins
Inspector
Office of Licensing & Guidance
Environmental Protection Agency
Johnstown Castle Estate
County Wexford

25 September 2006

Re: Waste Licence Application Register No. W0194-02

Dear Mr. Higgins

I refer to the Agency letter dated 06/09/06 in relation to waste licence application register no. W0194-02. Please find attached response to information request.

Yours sincerely


Peter Carey

Response to EPA Information Request

(i) Non-Technical Summary

Response to Question

The Non-Technical Summary has been updated to include reference to the European Waste Catalogue Codes as presented by Commission Decision 2000/532/EC. The other information provided in this response does not impinge on the Non-Technical Summary.

(ii) Infrastructure & Operation

Provide a revised drawing of the existing facility to include the existing weighbridge area and the constructed storage area located to the northwest of the site. Any further structural changes to the existing facility since the grant of Licence Register Number WO 194-01 shall also be included in the drawing.

Response to Question

The Drawing attached indicates the existing weighbridge area and puraflo / percolation area to the northwest of the facility, which is separated from the rest of the facility by construction of a separating wall.

(iii) Surface Waters

Provide a drawing outlining the site service in place on the existing waste transfer site including surface water, leachate handling and domestic wastewater infrastructure. In addition provide detailed technical information on the type of oil interceptors and attenuation infrastructure currently employed and/or proposed for the extended facility.

Response to Question

A Drawing showing site services at the existing waste transfer site is attached and indicates surface water, leachate handling and domestic wastewater infrastructure. Technical information details of the type of interceptor used is also attached.

Details on site services at the proposed extended area are shown in Drawing No. 2006-081-01- Fig 6.2 'Site Services Layout Plan', Section 6 of the EIS and described in Section 6 of the EIS.



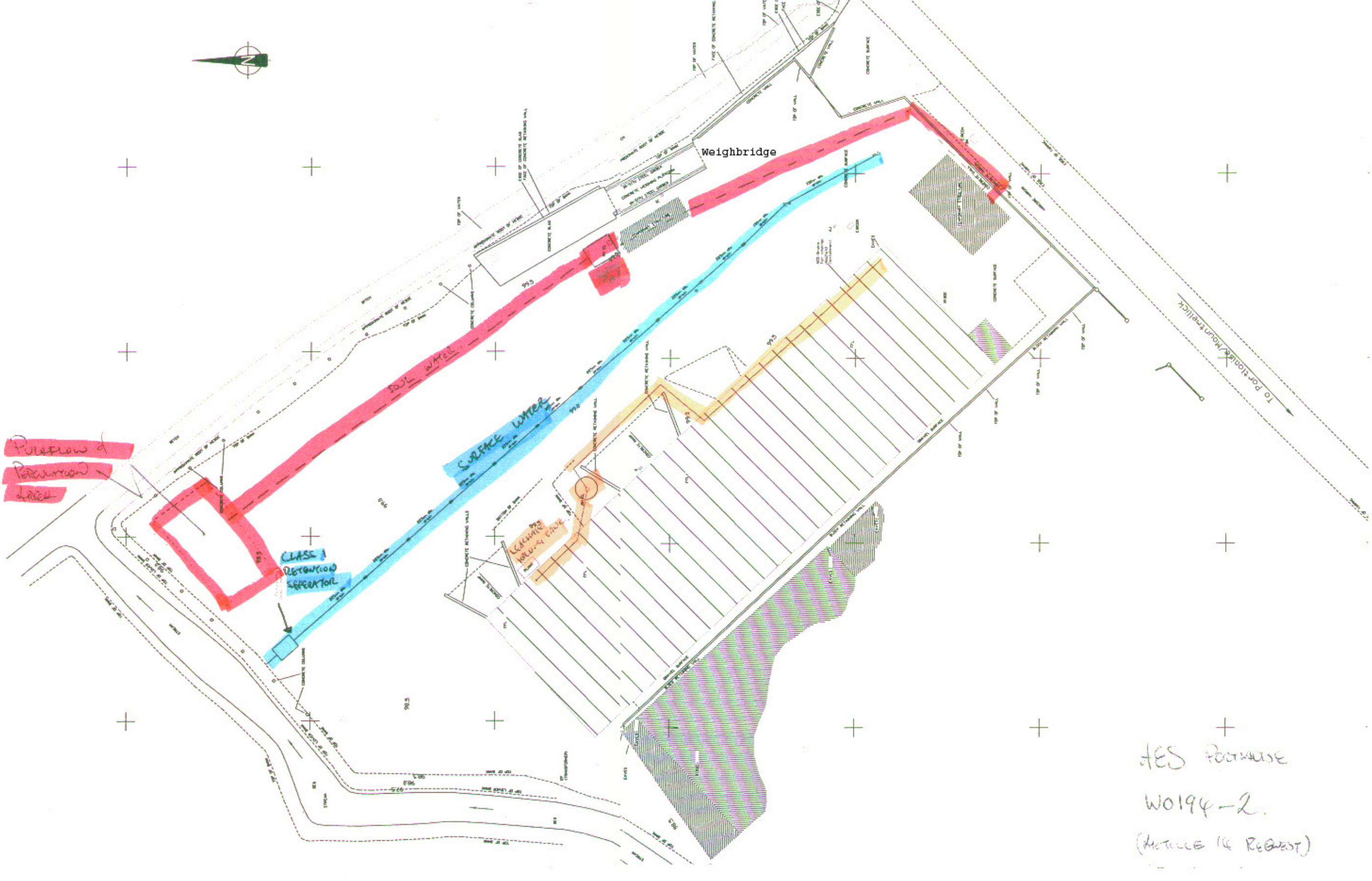
Proposed
Retention
Wall

CLASS 1
RETENTION
WALL

SURFACE WATER

weighbridge

JES POORHOUSE
W0194-2.
(ARTICLE 14 REQUEST)



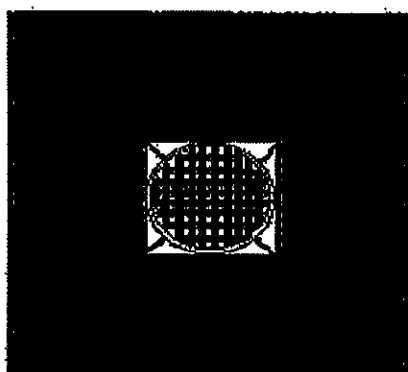
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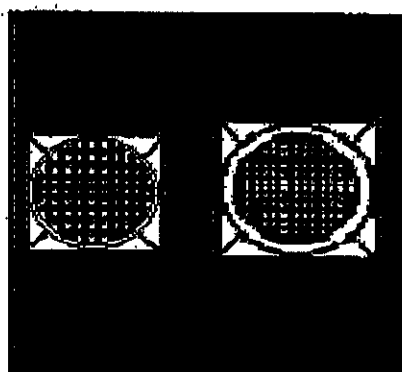
SCHEMATIC DIAGRAMS

Plan views

Plan view with the lid in place

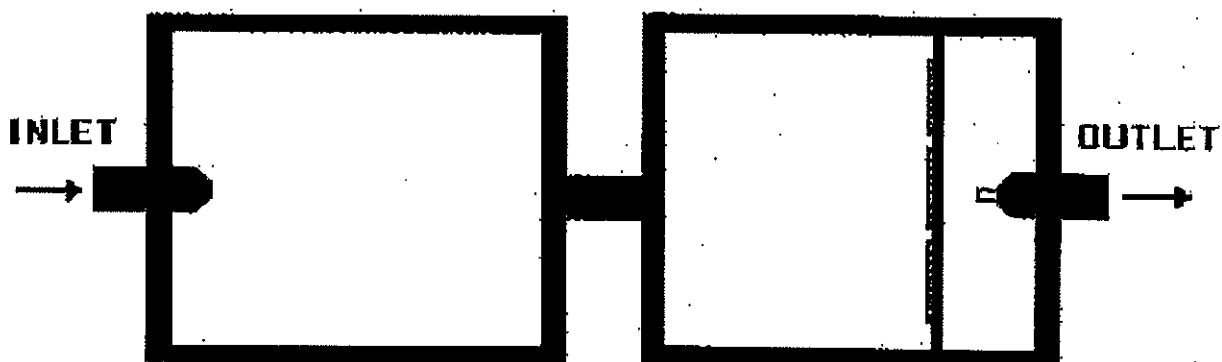


Sludge tank



Separator

Plan view with the lid removed



Sludge tank

Separator

COMPONENT SPECIFICATIONS

Tank specifications

C tank specifications	
Material	Prefabricated fibre reinforced 40 N concrete.
Length	2330 mm
Width	2330 mm
Height (exc. Lid)	2100 mm
Wall Thickness	75 mm
Floor Thickness	100 mm
Weight	4750 kg each
Tank coating	Europlan FK 42 epoxy resin
Internal volume	8000 litres each
Max. sludge capacity	4000 litres
Max. sludge height (from tank floor)	1 m
Max. oil capacity of the system	3000 litres
Max. depth of oil layer	375 mm
Inlet/Outlet pipe diameter	300 mm
Inlet/Outlet pipe material	Stainless steel
Connector pipe diameter	300 mm
Connector pipe material	u-PVC

Warning: The tanks should be emptied when the oil and /or sludge levels reach 80% of the stated maximum levels.
Never allow the tank to reach 100% of its capacity.

Lid specifications

Concrete lid	
Material	Prefabricated reinforced 40 N concrete.
Length	2330 mm
Width	2330 mm
Height (exc. Manhole)	2100 mm
Weight	2900 kg each
Load bearing capacity	400 kN
Mortar bed	20 mm

Manhole specifications

Manhole	
Diameter	800mm
Height	100 mm
Load bearing capacity	400 kN
Standard	EN 124

Manhole	
Diameter	600mm
Height	100 mm
Load bearing capacity	400 kN
Standard	EN 124

Coalescence separator

- **Type:** Class 1 according to European Norm. EN 858
- **Product:** Buderus Guss EuroLizer NG 50
- **Final effluent under standard test conditions:** less than 5 mg/litre of hydrocarbon
- **Coalescence chamber:** Stainless steel
- **Automatic closure device:** Density 0.85 g/cm³
- **Coalescence filter:** HDPE mesh
- **Max. flow rate:** 50 litres/second
- **Max. drainage area:** 3500m²

INITIAL OPERATION

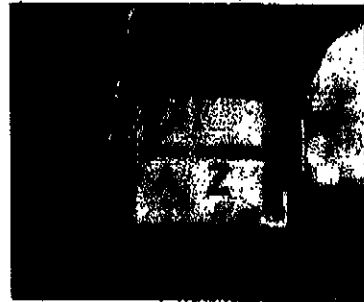
Ensure that the procedure described below is carried out after

- Installation
- Draining and cleaning

Procedure

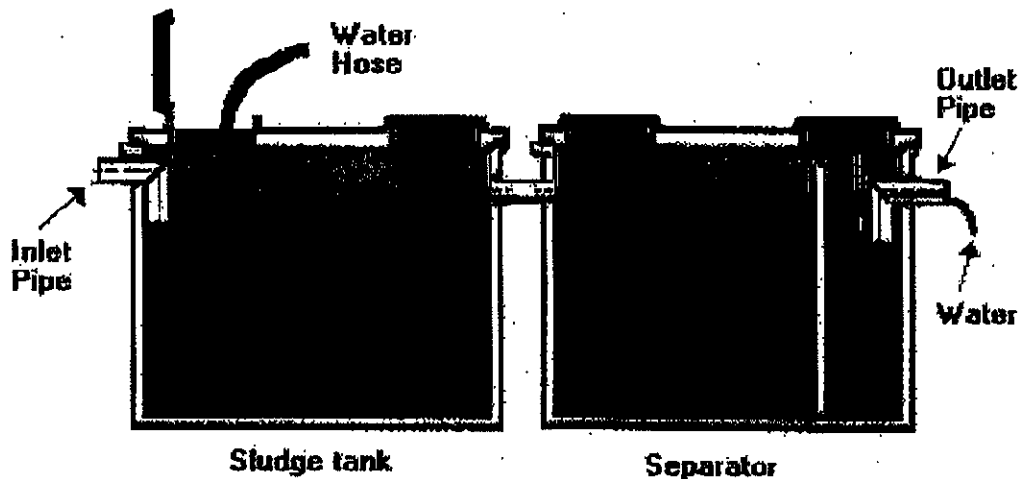
1. Ensure that the automatic closure valve is set to the 'T' position.

PUSH-ROD POSITIONS	
Position	Result
T	Sealing flap is locked in the open position. Warning: Not suitable for normal operation.
A	Sealing flap is open and can be moved by the float. (Suitable for normal operation.)
Z	Sealing flap is closed. Warning: Additional inflow will cause a backlog and overflow of water.



2. Insert a water hose through a manhole in the sludge tank.

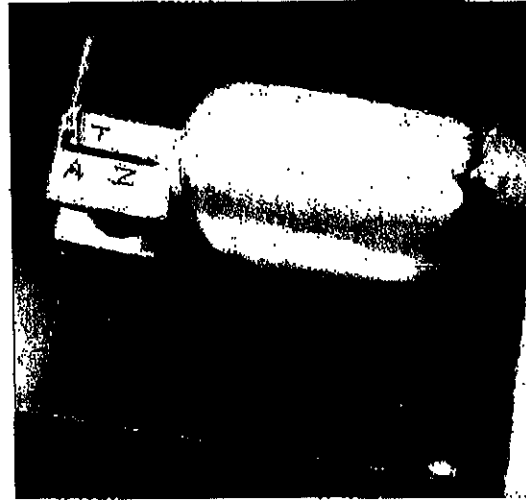
3. Fill the system until the water level stops rising and/or water begin to flow through the outlet pipe.



4. The push-rod is moved from 'T' to 'A' for normal operation of the system.

The push-rod should remain in the 'A' position.

If it moves to the 'Z' position the push-rod should be slightly raised until the arresting device (plastic float mechanism) clicks into place.



The picture shows the position of automatic closure when the push-rod rests at 'A'.

NOTE: Please follow the steps below if the automatic closure is closed ('Z' position) and cannot be reopened using the push-rod, when

- Filling the tanks with water
- OR
- There is no oil present in the tanks

Steps to reset the pushrod

- a) Open the separator tank manhole.
- b) Carefully lower a rod (approx. 1.5m to 2m in length) down along the outside of the final outlet pipe until it reaches the protruding edge of the automatic closure flap.
- c) Press down to open the automatic closure flap and release any excess water in the tank.

5. When the tanks are filled to the correct level and the components have been verified the system is ready for use.
6. **CAUTION:** Ensure that all manhole covers are correctly in place prior to operation.

NORMAL OPERATION & MAINTENANCE

Safety regulations

- ✓ Smoking or any source of a naked flame is strictly forbidden during any task on the interceptor.
- ✓ Before accessing the tanks the gas/air mix must be vented.
- ✓ If the tanks have to be entered they must be empty, clean and gas free.
- ✓ Regulations for avoiding accidents and the handling of dangerous materials must be followed in accordance to Safety, Health & Welfare at work (confined spaces) Regulations 2001 and the 2002 code of practice for the Safety, Health & Welfare at work (chemical agents) Regulations 2001.



According to the European standard prEN 858

- All parts that have to be regularly maintained shall be reachable at all times.
- Monitoring or inspection of the system should be carried out on a weekly basis.
- Maintenance must be carried out at least every six months or in accordance to the maximum permissible levels in the manufacturers instructions (see the table below).

Note: The table refers to normal operating conditions.

A task must be carried when relevant time interval has expired OR when the maximum permissible level has been reached, whichever arises first.

MAINTENANCE TASKS & FREQUENCY		
Task	Frequency	
	Time	Measurement
Inspection checks	Weekly	n/a
Remove oil layer	6 months	300mm
Empty separator tank	12 months	n/a
Sludge Removal	12 months	800mm from tank floor
Coalescence filter cleaning	6 months	n/a

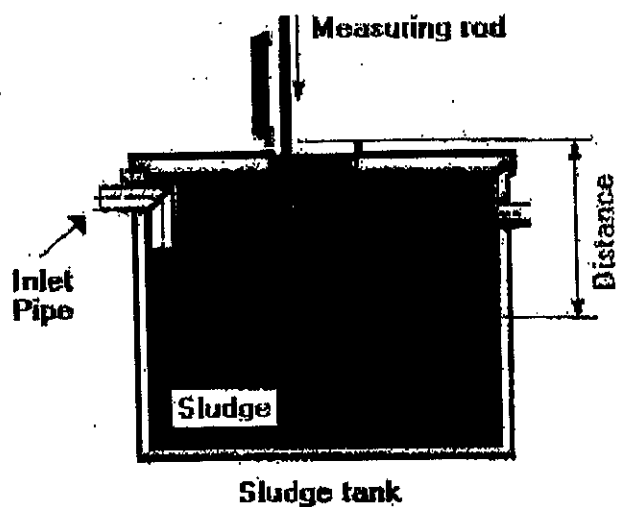
INTERCEPTOR MAINTENANCE

Sludge content

- Measure the maximum height of the settled sludge using a rod (approx. 2.5m to 3 m long) with a wide flat end.

Procedure to measure the sludge height

- Lower the rod down through the manhole nearest the inlet pipe until it reaches the top of the settled material.
- Mark the position of the manhole rim on the rod.
- Remove the rod from the tank and measure the distance from the bottom of the rod to the mark on the rod.
- These steps may be repeated a number of times to obtain an accurate estimate of the amount of settled material.
- If the distance is less than or equal to 1545mm the tank requires emptying.



Total height from manhole frame to tank floor = 2345mm

The maximum permissible level of sludge is $1\text{ m} \times 80\% = 800\text{ mm}$

Therefore the minimum distance from the manhole to the top of the sludge is

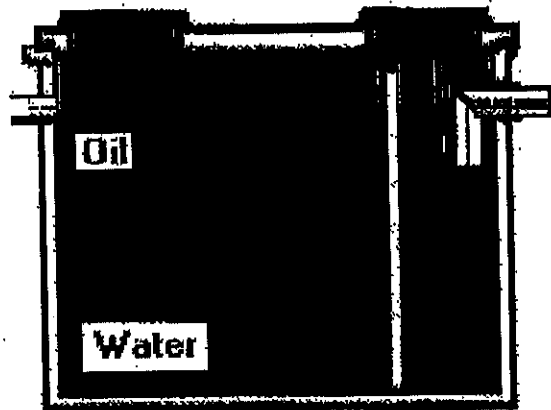
$2345 - 800 = 1545\text{ mm}$

Oil content

- Measure/estimate the thickness of the oil layer in the separator tank using a glass pipe or straight piece of clear hose. The recommended dimensions are an internal diameter of 25mm and a length of approximately 2m .

Procedure to estimate the thickness of the oil layer

- Lower the pipe or hose into the separator tank until it extends through the oil layer.
- Seal the top end of the pipe using a plug or stopper.
- Remove the pipe from the tank while the seal is in place.
- Hold the pipe in a vertical position.
- Examination of the pipe will show the oil layer floating on a water layer.
- Measure the depth of the oil layer.
- If the layer thickness is greater than or equal to 300mm the oil layer should be removed from the separator by vacuum.



Separator

Other Instructions

- Completely empty the separator tank at least once every 12 months.
- Remove the contents by vacuum .
- Clean the chamber.
- Remove residues on the walls, floors and pipes.
- **Warning:** Limit the pressure of high pressure cleaning equipment to prevent damage to the facility.
- Thoroughly clean and inspect the automatic closure unit.
- Remove the waste liquid used in the cleaning process from the tanks.
- Inspect and rectify any damage to the facility.
- Check warning devices(if applicable).

Coalescence filter

The following points and procedures should be followed for filter maintenance.

- Visually check the filter for contamination and accumulation of sludge.
- A heavily contaminated filter can reduce the flow rate of the system.

To clean the filter

- a) Remove the filter from the separator tank using the lifting hooks.
- b) Wash down with water over a suitable collection container.
- c) The collected waste can be pour into the sludge tank once the system has been restarted.
- d) To reinsert the filter place it in the guide and press down until it makes contact with the stopper.



Sampling shaft *(if applicable)*

- Clean the drain channel.

The sampling shaft is located between the system outlet and the out-fall manhole.

Operational record book

The following information must be kept in an operational record book.

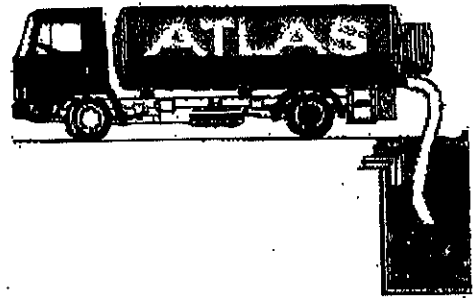
- Date and time of completed inspections.
- Measurement values.
- Deviation from set point values.
- Operational malfunctions.
- Rectifications.

Cleaning and waste disposal

In accordance to DIN 1999

"Proper monitoring, emptying and cleaning of the separators and sludge traps, as well as safe removal of the discharged or set off materials must be ensured in accordance with the official legal regulations.

The cleaning intervals must be defined so that the storage capacity of the interceptor is not exceeded and the functional efficiency is not interrupted."



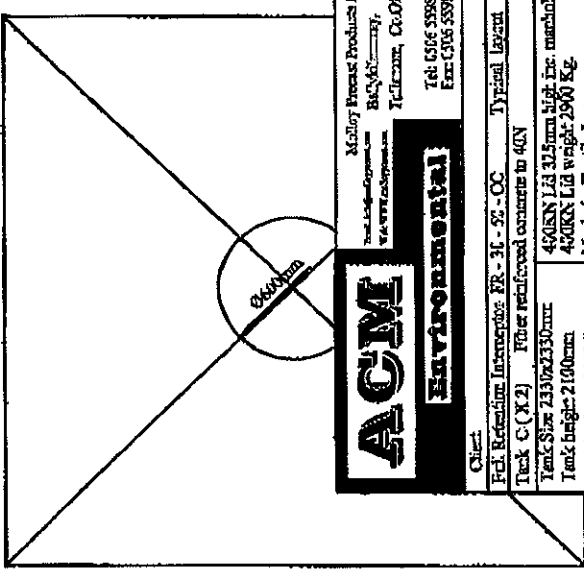
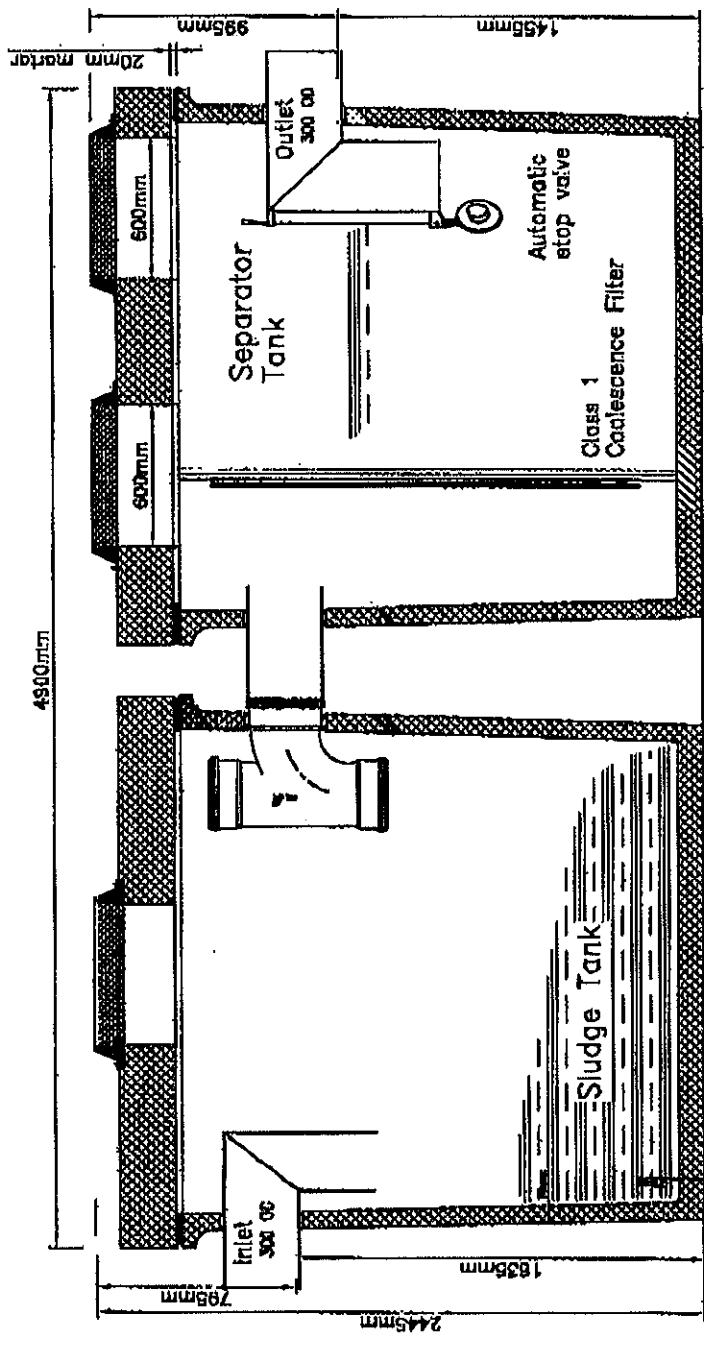
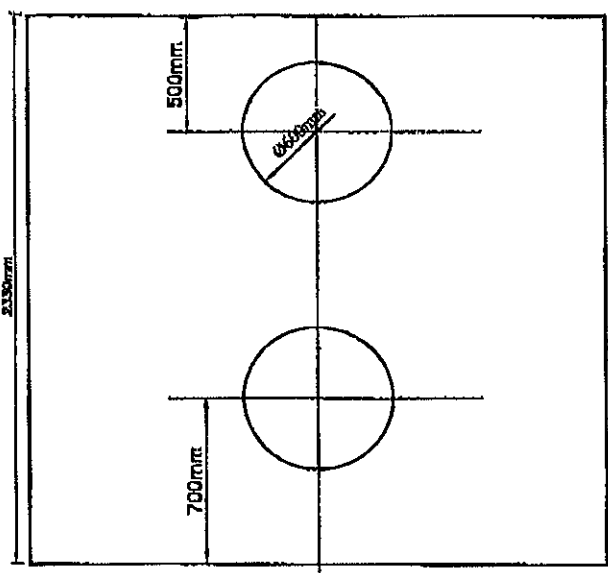
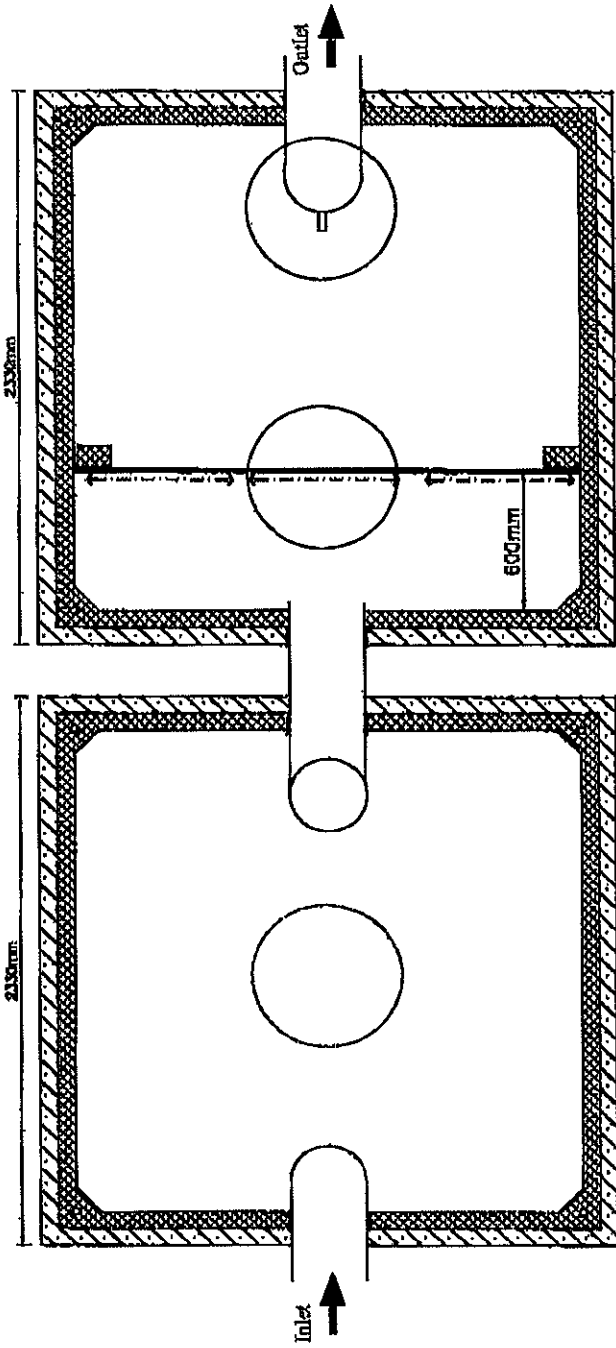
Following the emptying operation, the interceptor must be filled again with water. The automatic closing device must be cleaned and brought into its floating position.

To ensure proper cleaning and waste disposal we recommend that the customer should contract the services of a specialized licenced waste disposal company.

**For CLEANING SERVICES & more information
CALL Atlas Environmental Ltd. on 0502 78600 or
LowCALL 1850 504 504**

TECHNICAL DRAWING

- See attachment at the rear of this document.



ACM Environmental

McAlloy Precast Products (Pty) Ltd.
 2nd Floor, 10000 South Road, Bayswater, Western Australia
 Tel: 08 945 5989 Fax: 08 945 5989

Client: **ACM Environmental**

Proj: Retention Interceptor FR - 3L - 5L - CC Typical layout

Tank C (X2) Fiber reinforced concrete to 40N

Tank Size 2330x2330mm 4500N LIA 325mm high Inc. manhole

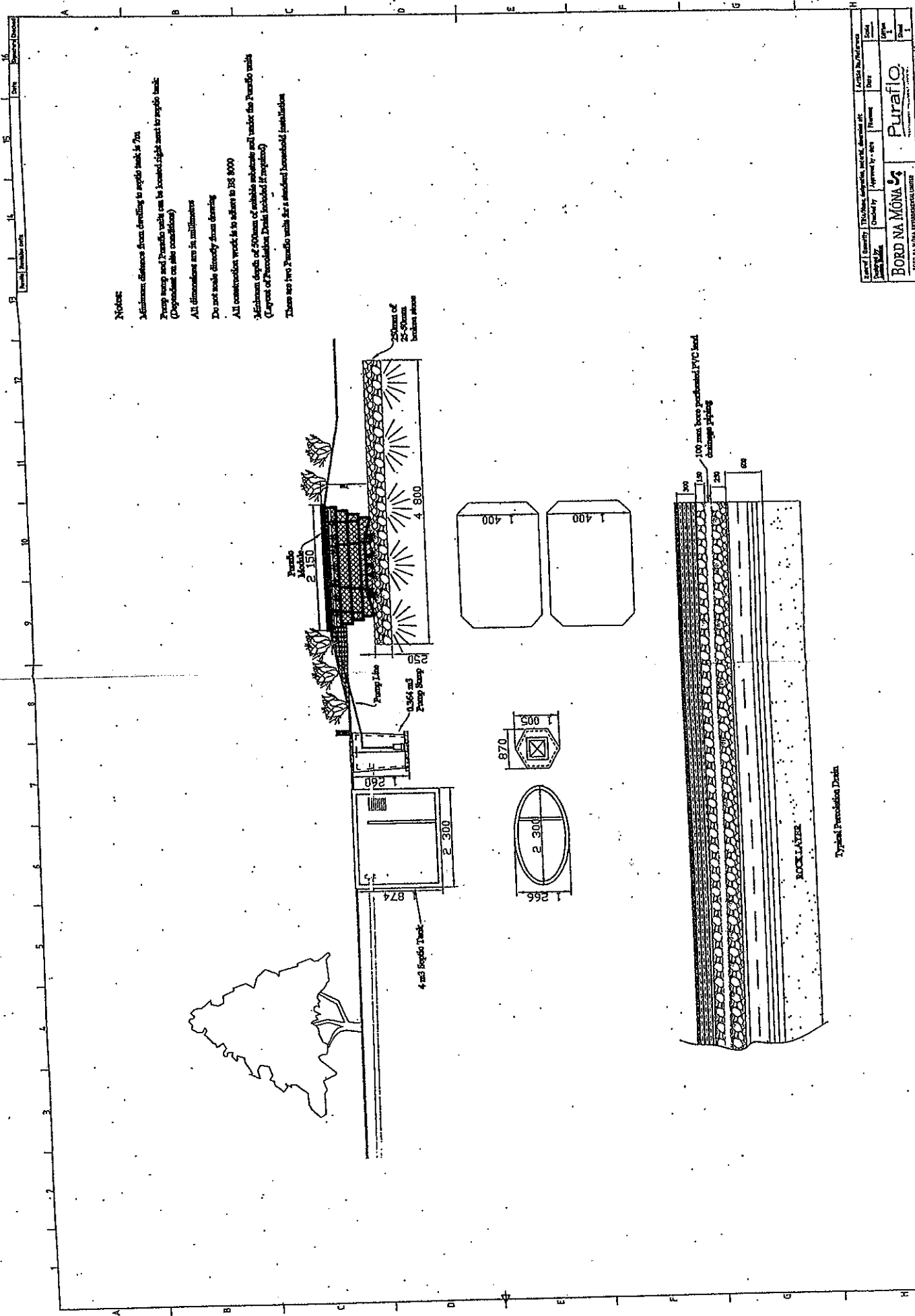
Tank height 2100mm 4500N Lid weight 290 Kg

Tank Volume 8000 Hlrs. Manhole's Durable Iron

Tank weight 4750 Kg. each

Class 1 Coalescence Filter

(Tank Dia. + 25mm. Weight ± 100kg) Date: 11/02/03 File: FR-3L-5L-CC.dwg



Order / Quantity	1700mm x 4800mm, 25-50mm BS 8000	Article No./Material	
Order No.	Order by / Approved by	Date	
BORD NA MÓNA 1000 NA MÓNA INDUSTRIAL LANE DUBLIN 15		Puraflo <small>PERMEATION DRAIN SYSTEMS</small>	
		Scale	Sheet
		Page	1