Environmental Management Plan

DEVELOPMENT :

TRELLECH, OFF GREENWAY LANE, MONMOUTHSHIRE, NP25 4UA.

1/25/2016

Ref-EMP-T01

CONTENTS

1. TYPE OF TREATMENT PLANT

Type of treatment plant **For example – package treatment works, septic tank**	Package Treatment
Make	Matrix Treatment System manufactured by C&L Fabrication Limited
Model	CLF8-NG-190
Installation date	
Who installed it?	
Capacity	

2. MONITORING AND MAINTENANCE CHECKLIST

Item	How Often (tick the appropriate box)		
	6 months	**1 year**	**2 years**
1. Check the primary settlement tank with a probe, the top floating crust blanket should not exceed 200mm thick, arrange de-sludge if required			
2. De-sludge the primary and final tank every 12 months* and de-sludge the bio zone every 24 months*. This should be done by an experienced local waste disposal tinkering company. * This applies to CLF units 1, 1A, 2, 3 & 4. Larger systems will require de-sludging more frequently on loading and type of application			
3. The tanker suction hose should be carefully lowered into the primary and final chambers ensuring all settles sludge is removed			
4. When de-sludging the bio zone, carefully lower the suction hose down the triangular section (rectangular in larger units) where the air diffuser pipework goes down making sure not to damage the pipework. Ensure the hose is down to the base of the tank so that all settles biomass sludge can be removed			

5. After de-sludging each compartment, it is essential that the unit is filled up with water. This can be done by using a hosepipe or by running several taps in the household(s)			
6. Remove air filter from the blower unit (remove top cover to access filter), clean and replace			

See general layout drawings CLF8-NG-190 & Matrix Operation & Maintenance Manual for De-sludge method.

Repeat the Plant Start up Procedure, section 5 of this manual.

3. MONITORING AND MAINTENANCE RECORD

Action	Date and Time	Carried out by	Result

4. FAULT FINDING/TROUBLE SHOOTING

Fault	Cause	Remedy
1. The blower is not running	Power cut	If temporary, do nothing. When the power is restored, the system will restart automatically
	Power supply RCD has tripped	Switch off the power and reset the RCD. Switch on and the blower should restart automatically. If it doesn't, switch off the power supply and call an electrician, on phase 3 supply check correct rotation
	Blower runs intermittently	Check air ducts are clear, as overheating in the enclosure will cause the high temperature trip to switch off the power until cool
2. Air bubbles are not rising from the diffuser	Blower is not running	Refer to fault Condition 1
	Blower running	Check all valves open and all air lines are not broken or leaking
3. There is no recirculation flow from the humus tank compartment	Blower fault	Refer to fault conditions 1 and 2
	Recirculation pipework is blocked	Use a wooden pole to agitate any sludge which has settled around the bottom of the recirculation pipework in the humus tank. If there is a substantial level of sludge, then de-sludge the humus tank as described in the Maintenance Schedule, section 6 of this manual
	The air control jet is blocked	Remove and clean the jet, In cleaning the jet, ensure the orifice is not enlarged

5. ACCIDENT & INCIDENT RECORD

Date and time of the incident	
What happened? What was it about?	
Was anyone else aware of this? If so, who?	
What caused it?	
What action did you take to fix the problem?	
What have you done to ensure that it does not happen again?	
Was there any significant pollution e.g. untreated sewage being discharged into a drain, river or stream? YES/NO **If yes, what pollution occurred?**	
If there was significant pollution, then you must notify Natural Resources Wales on 0800 807060 asap. Have you done so?	**Yes/No/Not applicable** **What time did you phone** **NRW Incident reference number**:
You must also write or send an email to confirm this to the local office (see your accident management plan for the address) **Have you done so?**	**Yes/No/Not applicable**
Please print your name, sign and date	

6. COMPLAINTS RECORD

Who made the complaint? Name	
Address **Tel no**	
Date and time they made the complaint	
What happened? What was it about?	
Was anyone else aware of this – other neighbours? If so who?	
Assuming the complaint relates to your site, what was the problem – what went wrong? If you can't find the source of the problem, you should contact a suitably qualified person to do so and record who this was, and what the problem was	
What action did you take to fix the problem?	
What have you done to ensure that it does not happen again?	
Was there any significant pollution e.g. untreated sewage being discharged into a drain, river or stream? YES/NO **If yes, what pollution occurred?**	

If there was significant pollution, then you must notify Natural Resources Wales on 0800 807060 asap. Have you done so?	**Yes/No/Not applicable** **What time did you phone** **EA Incident reference number**:
You must also write or send an email to confirm this to the local office (see your accident management plan for the address) **Have you done so?**	**Yes/No/Not applicable**
Please print your name, sign and date	

7. EMERGENCY CONTACTS

The table contains information and contacts you may need in an emergency (adjust to suit your site)

SITE DETAILS
Address:
Postcode:
Site access grid reference:

	OFFICE HOURS (SPECIFY)	OUT OF HOURS
MANAGEMENT COMPANY		
General Contact		
EMERGENCY SERVICES	999 or 112 (on mobiles)	999 or 112 (on mobiles
REGULATORS		
Health & Safety Executive	029 2026 3120	N/A
LA – Monmouthshire	01633 644644	N/A
National Resources Wales	General - 0300 065 3000	
	24 hr hotline – 0800 80 70 60	0800 80 70 60
NEIGHBOURS		
SPECIALIST ADVISORS		

8. PREVENTING ACCIDENTS AND WHAT TO DO IF THEY HAPPEN

Possible accident	What would the harm to the environment be?	How do we reduce the chances of it happening?	What to do if it happens?
Spillages			
Spillages during the de-sludging of the treatment plant	Contamination of land, drains, groundwater and water courses	Ensure pipe integrity has been tested prior to use and contractor/operator observes correct de-sludging process	Immediately call out maintenance contractor
Slow seepage of liquids from the treatment plant		Integrity of the treatment plant will be tested. Treatment plant will be maintained in line with manufacturer's instructions	
Failure of Plant or Equipment			
Releases of untreated sewage, due to faulty pipe work, valves, over-pressure, blockages, pump failure, severe weather and so on	Contamination of land, drains, groundwater and water courses	Visual inspection and completion of inspection checklist record. Preventative maintenance regime. Any underground pipes and tanks will be tested for integrity	Immediately call out maintenance contractor
Harmful substances/objects entering the treatment plant, for example, cleaning chemicals, garden pesticides, oils/fat/grease, nappies, sanitary products	Damage to the treatment plant and/or death of micro-organisms with possible subsequent contamination of groundwater and water courses	Read and understand the manufacturer's guidance on what can be put down drains, sinks and toilets. Inform all residents and guests of the restrictions. Have a list of chemicals which are safe to use with the treatment works in a designated spot and ensure everyone who used or purchased chemicals has access to and is aware of the list	Contact maintenance contractor

Flood			
Due to ingress of watercourse floodwater, blocked drains, burst water main, use of fire water	Contamination of land, drains, groundwater and water courses with untreated sewage and flood water	Ensure that no surface water/flood waters can enter the treatment works	Flood procedure describing what to do in the event of a flood warning such as installation of barge boards, use of sand bags Contact Management Company contractor
Failure of Services			
Due to failure of supply, electricity, supply and of sewage system. Due to utility supply being struck and broken/cut	Death of micro-organisms with possible subsequent contamination groundwater and water courses	Provision of alarm on the treatment works to warn operators of power failure. Provision of back-up generator should the works require constant electricity to ensure adequate treatment	Use emergency generator (if available). Call out utility company for urgent call out. Contact Management Company contractor
Failure of Containment			
Failure of containment facilities due to land movement, impact, corrosion and so on	Contamination of land, drains, groundwater and water courses	Provision of secondary containment for hazardous liquids. Inspection of primary and secondary containment facilities	Contact Management Company contractor
Vandalism			
Unauthorised entry and tampering or malicious damage to property, plant and equipment	Possible contamination of land, drains, groundwater and water courses	Ensure treatment plant is secure	Contact Management Company contractor

9. FURTHER HELP

- Further information on preventing pollution can be found in the Pollution Prevention Guidelines available at enquiries@naturalresourceswales.gov.uk

  PPG 4 Treatment and disposal of sewage where no foul sewer is available

  PPG21 Incident response planning. It could be useful in planning a spill response plan

- British Water website www.britishwater.co.uk

  British Water is the trade association for the water supply chain. Here you can find accredited service engineers to maintain and repair your treatment plant and in the publications section there is guidance on how to use and operate a small sewage treatment plant.