Inspection guidance sheet – Descriptive

Environmental Permitting Regulations 2010

Descriptive permit compliance inspection guidance sheet

Site name:	Manmoel Wastewater Treatment Works, Manmoel, Blackwood, Caerphilly, NP12 0RN				
Permit number:	EPR/AA0012101	Private: or		WSPLC:	X
Inspected by:	Luke Burton	Natural Resources Wales office:		Rivers House, St Mellons	
Nature of inspection: (delete as appropriate)	Routine planned inspection	Accompanying officer: (if present)		Emma Jones Tamarind Falk	
Date of inspection:	03/10/19	Time of inspection:		Arr. 11.30 Dep. 11.45	
Name of receiving waterbody and WFD status:	n/a; Groundwater discharge	Sample point number:		n/a; groundwater discharge	
Are 'unusual weather conditions' occurring at time of inspection:				Yes	

Since previous inspection:

Do the relevant criteria for a descriptive permit still apply, such as p.e. is <250, no trade effluent is received by works, sufficient dilution available, no potable abstractions likely to be adversely affected by discharge?	• Population served does not exceed 250 • No trade effluent present • Adequate works maintenance • No environmental impact
Have we been informed of any failure of the site?	No
In the event of any such failure what was the reason and was the site returned to normal operation as soon as was practical?	n/a
Have we been notified of 'unusual weather conditions' and their impact upon the operation of the works?	Yes – See other information
Have we asked for a written report on maintenance or non-routine actions that may have affected works performance:	No
Environmental Management System (EMS)	Not available on site

Impact on Receiving Water: record as Absent or Present or No safe access

	Upstream of discharge	Downstream of discharge
Sewage derived debris -	n/a; Groundwater discharge	n/a; Groundwater discharge

Sewage fungus -	n/a; Groundwater discharge	n/a; Groundwater discharge
Significant trace of visible oil or grease -	n/a; Groundwater discharge	n/a; Groundwater discharge
Excessive (thick/massive) algal growth -	n/a; Groundwater discharge	n/a; Groundwater discharge
SATISFACTORY (no impact) (delete as appropriate)	n/a; Groundwater discharge	

Treatment plant/works operation:	**Comments on operation and maintenance**: Note, not all aspects will be relevant to all sites.
Inlet works -	No inlet works present
Primary tanks -	1 primary tank present. Soilds are tankered out monthly and taken to the Cardiff works. No evidence of tinkering spillages or surcharging.
Biological treatment -	The site is served by a trickling filter bed. High influent flows were causing the distributor feed tipper trough to remain in the 'tipped' position, allowing influent to flow continually into the influent distributor. The rotating influent distributor was rotating freely. Orifices and splash plates were free of debris. Air vents were present and free from surface blockages. Influent was being distributed evenly across the synthetic media surface. Some evidence of solids (sanitary towels) on media surface.
Final settlement -	Original application refers to a humus tank. However, this was not observed on site or referenced by the operatives on site.
Soakaway system -	The soakaway system could not be observed as it is overgrown with vegetation. The original permit application refers to a stone filled soakaway pit (6ft x 6f x 5ft) and then to a herringbone soakaway.
Land treatment -	
Significant carry over of suspended solids from tanks	The filter effluent / treated effluent appeared clear with no visual evidence of suspended solids, oil or grease.
Outlet to watercourse or other sample point - constructed, maintained and labelled so that representative sample can be obtained	No outlet to watercourse present: groundwater discharge. Outlet pipe from trickling filter bed flows into an open chamber where it can be observed.
Flow measurement structure - maintained and enables daily volume and instantaneous flow rate of the discharge to be measured or	No flow measurement present.

determined -	
All alarms or power units appear operational -	No alarms or power present.
No significant odours or other features from the works or its discharge resulting in nuisance -	No significant odours present at time of visit around the inlet, primary tank and trickling filter bed. Soakaway system not accessible, but no odour detected from approximately 10 meters away from understood location.
SATISFACTORY OPERATION AND MAINTENANCE - (delete as appropriate)	Yes

If either there is an obvious impact on the receiving water, or evidence to show that the works is not adequately operated and maintained, then you must make a check against the legal permit document for this works, before you can confirm non-compliance.

COMPLIANCE WITH PERMIT:	COMPLIANT	X	or NON COMPLIANT	

Note: Additional evidence may be gathered if we suspect that a discharge may be non compliant or having an adverse impact, such as collection of samples (effluent and/or receiving water) or biological assessment.

Note of any samples taken	Upstream	Downstream	Effluent
Photograph	None	None	None
Chemical	None	None	None
Biological	None	None	

If non-compliant, check to confirm whether the criteria for a descriptive permit still applies:

- population served not exceed 250
- no trade effluent present
- adequate works maintenance
- no environmental impact

Signed: Luke Burton Date: 03/10/19

Data Reporting - the inspection must be reported on a CAR Form which is Public Register information that we must hold in hard copy pending provision of suitable archiving arrangements.

Other information

Biological Treatment: The system was replaced approximately 6 years ago. The system works on a Dry Weather Flow retention time of 6 hours. High influent flows were causing the distributor feed bucket to remain in the 'tipped' position, allowing influent to flow continually into the influent distributor. This was suspected to be occurring as the site is fed by a combined sewer system, and there had recently been heavy rainfall.

Maintenance: The site undergoes annual mechanical maintenance has a weekly visit from DCWW operational staff. During the weekly visit all aspects are visually inspected. The rotating influent distributor orifices, splash plates and media are cleared of debris.

Other information or note of actions required cont…

1. As per condition 1.1.1 (a) the activity shall be managed in accordance with a written management system. No system was provided on site. A copy of the management system must be provided.

2. Confirm that the high influent flows are not compromising the ability of the works to meet its permit conditions.

3. Attempt to stop solids such as sanitary wastes entering the works or passing through from the primary tank onto the filter bed.

4. Confirm if the works features a humus tank and if so its location and operation (maintenance etc.).

5. Locate the soakaway system and manage vegetation so to allow access to it.