Chapter 16a
Non financial measures
Sewerage service serviceability indicators

Covering:
Enhanced measures for sewerage assets

Non financial measures
Chapter 16a
Sewerage service serviceability indicators

This information is required to inform an assessment of serviceability to customers. There is one block of information, block A to be reported on in AIR08.

Guidance

Sewers – Maintenance

Block A covers sewer maintenance activity. This block now splits out repairs to sewer collapses reported in table 16 into rising main and gravity sewer repairs. Rising mains are pipes that carry sewage by pumping under pressure or under suction (for example where sewage is moved under vacuum) from a powered asset (for example a pumping station). The aim is to inform understanding of underlying trends in the failure of asset types that make up this group of assets

Sewer blockages are also included, and their number is calculated from the number per 1000km of sewer from table 16.

Guidance for reporting equipment failures which had, or were likely to have, a detrimental impact on service to customers or the environment.

This indicator is focussed on equipment on the sewerage network and should exclude all plant and equipment on sewage treatment sites. The Company should explain in the commentary whether failures of terminal pumping stations have been included.

Equipment Failure	Description
Pumping Station (Foul, Surface Water or Combined)	The failure of a pumping station (i.e. inability to pump sufficient forward flows) reported as one failure regardless of numbers of failed components contributing to the total failure. **N.B. Exclude power grid failure events except where the company's standby generation facility failed.**
Overflows (CSO and Emergency)	The failure of an emergency or combined sewer overflow to operate properly leading to increased likelihood of upstream surcharge / flooding and / or un-consented discharge of sewage to environment.
Penstocks	The failure of any sewerage infrastructure penstock or flow shut off valve in a fixed position.
Anti-Flood Valves	The failure of anti-flood valves protecting customer property from flooding. Include both standard mechanical and pumped anti-flood valves, and report if failed in closed or open positions.
Vacuum Sewerage Systems	The failure of a vacuum sewerage system, or parts of a system, leading to surcharge and / or customer flooding including individual failures of vacuum pots.
Storage Tanks	A failure to maintain sufficient capacity of a storage facility leading to increased likelihood of customer flooding and / or un-consented discharge of sewage to environment. Include failures of any integral return pumping and screening / maceration equipment that impact on required capacity
Flow Control Devices (i.e Hydrobrakes)	The failure of a flow control device to operate properly leading to upstream or downstream surcharge / flooding.
Real Time Telemetry Control Systems	The failure of a real time control system to operate properly leading to increased likelihood of upstream or downstream surcharge / flooding or un-consented discharge of sewage to environment.
Oil Interceptors	Failure of an oil interceptor to operate properly leading to an increased likelihood of un-consented or polluting discharge to the environment.
Chemical Dosing	The total failure of chemical dosing plant over an extended period (i.e. not breakdowns responded to and resolved promptly) leading to increased likelihood of odour from the sewerage network.

Company commentary

Sewers – Maintenance

The company is expected to comment on significant changes from the reported figures for 2006/07. They should also record the location, date and time of gravity sewer collapses, rising main breaks, blockages and equipment failures with a view to this information being used for spatial analysis and an update of their underground asset management plan.

The company should state what historical data they have on sewer blockages, and indicate whether they will be able to provide data suitable for trend analysis. If the company is content to provide this in this Annual Information Return then it should do so, otherwise it should say when sufficiently reliable data could be made available.

Guidance to Reporters

Sewers - Maintenance

The reporter should:

- Investigate and comment on the integrity of the data capture and retrieval systems for determining the split between rising mains and gravity sewer collapses and confirm relevant confidence grades;
- Confirm that the sum of rising main breaks and gravity sewer collapses is equal to the total number of sewer collapses implied by Table 16;
- On blockages, to check the company systems and report on its ability to provide historic data, so as to establish a trend;
- On equipment failures comment on the company's interpretation of 'equipment failure' and whether the trend in such numbers gives a good indication of the service capability of these assets. Also to comment on advantages and disadvantages for monitoring performance of 'equipment' with non-infrastructure maintenance; and
- Review the nature of inclusions and exclusions and confirm that the data reported aligns with the company statement and what greater clarity in definitions might be helpful to assist in consistent reporting within the industry.

Table 16a line definitions

A SEWERS – MAINTENANCE

1	Total number of rising main failures	nr	0 dp
Definition	Number of repairs to rising main pipe breaks.		
Primary Purpose	Confirming delivery of key outputs and service.		
Processing rule	Input		
Responsibility	Network Regulation Team		

2	Total number of gravity sewer collapses	nr	0 dp
Definition	Number of repairs to gravity sewer collapses.		
Primary Purpose	Confirming delivery of key outputs and service.		
Processing rule	Calculation: table 16 line 12 minus table 16a line 1 multiplied by table 16 line 14 divided by 1000.		
Responsibility	Network Regulation Team		

3	Total number of sewer blockages	nr	0 dp
Definition	Number of sewer blockages cleared.		
Primary Purpose	Confirming delivery of key outputs and service.		
Processing rule	Calculation: table 16 line 13 multiplied by table 16 line 14 divided by 1000.		
Responsibility	Network Regulation Team		

4	Total number of equipment failures	nr	0dp
Definition	The total number of sewerage equipment failures. The total number of sewerage equipment failures which had, or were likely to have, a detrimental impact on service to customers or the environment. 'Equipment' includes • Pumping stations (foul, surface water or combined) • Overflows (CSO and emergency) • Penstocks • Anti-flood valves • Vacuum sewerage systems • Storage tanks • Flow control devices (e.g. Hydrobrakes) • Real-time telemetry control systems • Oil interceptors • Chemical dosing.		
Primary Purpose	Confirming delivery of key outputs and service.		
Processing rule	Input		
Responsibility	Network Regulation Team		

CHANGE CONTROL SHEET

CHAPTER 16a

2008/1.0	First issue of chapter for the SBP period