Reporting guidance – Sewer collapses per 1,000km[1]

Objective

This guidance seeks to enable all companies to report on sewer collapses for the defined year with confidence and at a reasonable level of accuracy and with a common approach. Companies shall apply consistent and robust methods and common assumptions. This will facilitate the comparison of performance across companies by customers, regulators and other companies with reasonable confidence.

Key Principles

There are several key assumptions made in the compilation of the guidance:

- Reporting on number of sewer collapses shall be subject to each company's assurance process which is applied to all measures reported annually.
- Companies have a methodology or procedure in place for reporting on sewer collapses
- There is an assumption that there will be continued improvement by all companies in the short and medium term through innovation, new technology, data quality improvements and staff training:
- The measure assumes a clear and simple approach that can be understood by customers and regulators;
- The essential reporting requirements for reporting on sewer collapses are set out in the guidance;
- The focus of the guidance is on annual reporting of number of sewer collapses. It is not intended as a definitive guide to managing the risk of sewer collapses;
- Exclusions are to be kept to a minimum and shall be consistent with the reasonable expectations of an affected customer.

Applying this guidance is likely to mean that comparisons of historical performance between companies, and of individual companies' previous performance, may not

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[1] This is the same guidance as included in the March 2018 report for Ofwat and Water UK: "Targeted review of common performance commitments".

necessarily be valid. However, it is anticipated that future individual company year on year trends in performance will be possible.

Measure Definition

Number of sewer collapses per thousand kilometres of all sewers that have not been identified proactively by the company and causing an impact on service to customers or the environment.

This measure seeks to reflect failures, in the asset, causing an impact on service to customers or the environment that requires replacement or repair to reinstate service, while maintaining incentives for companies to proactively investigate asset quality.

A reportable sewer collapse is considered to be where a failure has occurred to the pipe that results in either any contact with the company (i.e. an impact on service has caused someone to contact the company) or any unplanned escape of wastewater and result in the need to replace or repair the pipe to reinstate normal service (as set out in the flow diagram below). The measure intentionally does not refer to the magnitude of the collapse.

The measure includes rising mains pipe bridges, and failures on the infrastructure network, including inputs into the inlet of treatment works and terminal pumping station rising mains (in accordance with RAG guidance 4.07).

Impact on service to customers is the loss of pass forward flow at the location of the collapse. Where there has been no impact on a customer but there has been flooding or pollution there will be deemed to have been an impact on the environment.

Note this measure should include all public sewer and lateral collapses recorded by the company inclusive of those incidents that have been reported as flooding or pollution failures, if the primary cause of the flooding or pollution was a sewer collapse.

Note multiple incidents on the same length of sewer (manhole to manhole/ valve to valve) will count as a single incident if all work is carried out as part of the same remedial job. This assumes that the locations are in close proximity. This would not be the case if separate locations were more than 25m apart.
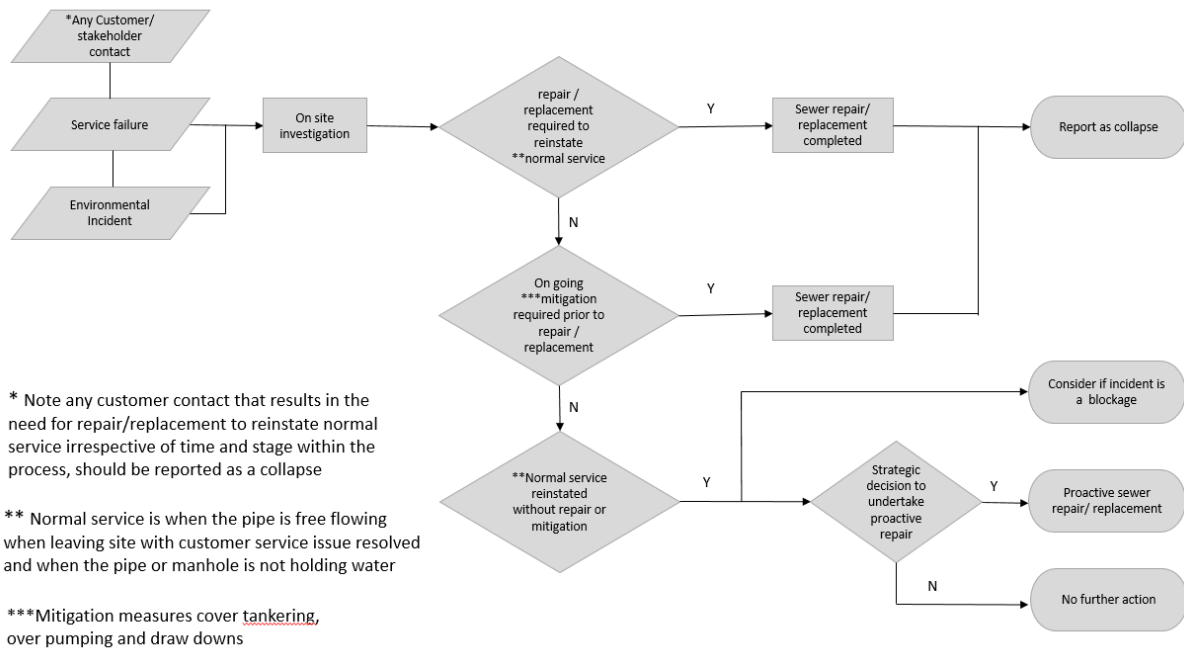
For clarity if jetting enables restoration of flow without the need for pipe replacement or repair then the incident is not to be reported as a sewer collapse.

However, if pipe replacement or repair is needed to resolve an issue that has been identified as a result of either a contact with a company or any unplanned escape of wastewater, then it is to be reported as a sewer collapse in the reporting year in which the service impact was reported to the company, not when the replacement or repair took place.

Reporting Process

The process for deriving the number of sewer collapses is given in the diagram below:

Deriving the number of sewer collapses

* Note any customer contact that results in the need for repair/replacement to reinstate normal service irrespective of time and stage within the process, should be reported as a collapse

** Normal service is when the pipe is free flowing when leaving site with customer service issue resolved and when the pipe or manhole is not holding water

***Mitigation measures cover tankering, over pumping and draw downs

A sewer collapse should be reported in the reporting year when the service incident was reported to the company, not when the replacement or repair took place.

A company is required to report against this definition and:

Disclose where its methodology does not comply with this guidance using the checklist in Annex A;

Explain the reasons for any non-compliance;

Separately record and report the number of exclusions that are attributed to patch repairs and sewer lining.

Set out its plans and programme to comply with the guidance; and

Disclose any other factors which have an impact on the methodology for reporting collapses.

Components

Sewer Length

Companies should separately record the length of sewer that was transferred to their responsibility under the Transfer of Public Sewers Regs 2011.

Exclusions

The following exclusions apply to the sewer collapse measure definition:

Proactively identified collapses – Should the need to replace or repair a pipe be found as a result of proactive activity (survey or proactive sewer maintenance work) on the network then it should be excluded (see flow diagram above).

Third party damage – Third party structural damage (including water utility damage) of the sewer is not an indicator of asset health and hence should be excluded.

Manhole damage and internal backdrops should be excluded

Displaced joints, cracked pipes, open joints, intruding connections, hard blockages patch repairs and sewer lining do not reflect sufficiently significant structural failure hence should be excluded from the measure.

Root ingress is excluded unless it has resulted in a need for pipe replacement

Annex A: Compliance Checklist

A company is required to complete this checklist for submission with its reported value for sewer collapses.

The elements of each component to be assessed separately based on the following rules:

Compliance for elements is reported against:

R	Not compliant with the guidance and having a material impact on reporting
A	Not compliant with the guidance and having no material impact on reporting.
G	Fully-compliant with the guidance

An overall RAG to be assigned for each component based on the following rules:

Compliance for overall components is reported against:

R	There are one or more red elements in the component or the combined effect of amber elements is considered to produce a material impact.
A	Half or more of the elements in the component are amber and the combined effect of the amber elements is considered not to produce a material impact.
G	More than half of the elements in the component are green

	Component	Compliant (R/A/G)	Reason for any non-compliant components	Confidence grade
1	Number of collapses			
2	Sewer length			
a	Length excluding transferred sewers			
b	Length of sewers transferred under the Private Sewer Regs 2011			

For each component on the checklist companies will report a confidence grade.

Confidence grades provide a reasoned basis for companies to qualify the reliability and accuracy of the data. Companies should employ a quality-assured approach in the methodology used to assign confidence grades, particularly if sampling techniques are in place.

The confidence grade combines elements of reliability and accuracy, for example:

A2   Data based on sound records etc. (A, highly reliable) and estimated to be within +/- 5% (accuracy band 2)

Reliability and accuracy bands are shown in the tables below.

Reliability Band	Description
A	Sound textual records, procedures, investigations or analysis properly documented and recognised as the best method of assessment.
B	As A, but with minor shortcomings. Examples include old assessment, some missing documentation, some reliance on unconfirmed reports, some use of extrapolation.
C	Extrapolation from limited sample for which Grade A or B data is available.
D	Unconfirmed verbal reports, cursory inspections or analysis.

Accuracy band	Accuracy to or within +/-	But outside +/-
1	1%	-
2	5%	1%
3	10%	5%
4	25%	10%
5	50%	25%
6	100%	50%
X	Accuracy outside +/- 100 %, small numbers or otherwise incompatible (see table below)	