

**21st Century Drainage Programme:
UK WIS flushability standard development (to supersede existing Water UK ‘SNAP’
protocol
Continuation into the development of the ISO Technical Report
Contribution into the development of a global wastewater only flushability standard**

Need for Project

The significant rise in the use of wet wipes and other hygiene products over the last 15 years has resulted in a similar increase in the flushing of such items. The vast majority of these items are unsuitable for disposal via the WC; they do not disintegrate or disintegrate very slowly, resulting in a significant rise in the number of sewer blockages, pump clogs and associated sewer flooding/pollution incidents.

Following six years of work, in 2012, WRc and the UK water industry published the world’s first water industry led protocol to assess the suitability for flushing of wipes and other so-called flushable products. This became known as the *SNAP Protocol* and has helped to define what is/is not suitable for WC disposal.

In recent years, attempts have been made to produce an international testing standard, most notably through the International Standards Organisation (ISO) TC224/ WG10. Unfortunately, this process is currently suspended and it unlikely that the work will achieve its original objectives.

Substantial progress was made in a number of technical areas before the ISO process was suspended. This information and technical work that has been carried out since the publication of the *SNAP Protocol* could be used to update and improve the testing methodologies and advice given in that protocol.

International efforts at reaching a global testing standard have not completely stopped since the suspension of the ISO work. It is also possible that a new ISO project may emerge. It is important that the UK maintains an interest in these projects, both to influence their direction and to make sure that nothing is

proposed that may harm UK water industry interests.

Objectives

The project objectives are to:

“Produce an agreed global wastewater industry standard for testing the flushability of wipes...”

This objective will be met through a series of tasks as detailed below.

Work Programme

The work involves the following key tasks:

- 1) Preparation of a Project résumé.
To be discussed and the project scope agreed at the initial meeting.
- 2) Continuation of technical support to ISO/TC224/WG10.
It is envisaged that the ISO project will need to be completed, most likely by the production of a Technical Report (TR). This TR is unlikely to achieve the ISO projects original objectives. Nevertheless, it is important that the UK has a significant technical input into the TR, to ensure that it is not detrimental to the UK water industry.
- 3) Further development of testing methods.

The ISO work has highlighted some areas where the methodology specified in the *SNAP Protocol* could be improved.

Some of these improvements have already been achieved via the ISO working groups but three areas remain where further work is required. These are:

- i) Shake flask disintegration testing;

- ii) Development of a drainline snagging test; and
- iii) Biodegradability.

This fundamental work will be carried out as part of this project.

- 4) Development of a UK Water Industry Specification (WIS).

This will be based upon the proven requirements of the SNAP Protocol, but updated using the experience and knowledge gained from the ISO working groups. The new information gained in Task 3 (see above) will also be incorporated into this work.

Similarly, new information gained from the Wipes in Sewer Blockage project will be used to inform the development of the WIS.

- 5) Development of a global wastewater industry standard.

WRc will continue to work with those developing an international wastewater standard. Although, on the basis of current discussions, it would appear that this document is unlikely to meet the current UK requirements, it is important that the UK maintains a presence in the drafting of this document, to make sure that UK interests are represented.

- 6) An end of project technology transfer workshop.

Timetable

The project is commencing in mid-March 2017 and is due for completion by late December 2017.

The outstanding development/testing work (Task 3 above) will be completed by late June 2017. The information gained will feed into the drafting of the WIS, which should be available for comment by mid-September. Subject to obtaining timely comments, the final version of the WIS should be available in late November/December 2017.

The timing of participation in future ISO activities and the global wastewater industry standard will depend upon the

progress made in those international groups. However, it is envisaged that the work will take place between April and December 2017.

The end of project workshop will be held around the year end or, if not convenient then, early 2018.

Benefits

The project benefits will be to:

- Ensure that UK continues to participate in international initiatives, namely the ISO work and the international wastewater industry standard. This will ensure that the UK water industry interests are considered.
- Develop a WIS. This will be an improvement on and supercede the *SNAP Protocol*. This will ensure that the UK continues to lead the world in testing standards, the UK's specific interests are taken into account and, most importantly, help to inform retailers and manufacturers of the water industries requirements.

Project team

The project was awarded to WRc who have significant expertise and experience in all areas pertinent to this project. WRc developed the *SNAP Protocol* and has been involved in a more recent ISO initiative.

The industry Programme Manager is John Spence (Water UK) and the Project Steering Group Chair is Rachel Dyson (Anglian Water).