

Flushable Wipes: An International Problem

Presented by:
Raleigh Water



**THIS IS NOT
A TRASH CAN.**

'Disposable' & 'Flushable'
wipes clog your sewer pipes.

THINK YOU FLUSH



**WIPES
CLOG
PIPES**





of backups are caused by wipes

Source: Sydney Water

Problems caused by Wipes



The Problem with Wipes

Two problems are associated with wipes:

1. Non-flushable wipes are not labeled clearly, so consumers do not know to dispose of them in the trashcan, not the toilet
2. Wipes labeled “flushable” do not actually break down well in real sewer systems



The Issue is the Tissue

Definition of Nonwoven:

A primarily fibrous assembly — other than a traditional paper, woven, or knit — which has been engineered to some level of structural integrity by physical and/or chemical means.

Basically, a nonwoven wipe is made to hold together better than toilet paper.



Cottonelle® Toilet Paper

Soft and strong or a gentler clean – the choice is yours.



Cottonelle® Flushable Moist Wipes

Feel cleaner and fresher than with toilet paper alone.

To be flushable

The product must:

- Break into small pieces quickly
- Must not be buoyant
- Does not contain plastic or regenerated cellulose and only contains materials which will readily degrade in a range of natural environments

NRRRF Experiment



- Performed by Adele Duterte and Kerreen Ryan in 2009
- Staff used a 2000ml beaker filled with water, placed on a magnetic stirrer, and set to swirl with a whirlpool effect
- Items were tested over a one hour period
- Scott's toilet paper was used as the control
 - Instantly disintegrated upon spinning

NRRRF Experiment

NO DISINTERGRATION

- Puff's Plus Tissues
- Cottonelle Flushable Wipes
- Playtex Gentle Refresh Wipes
- Preparation H Medicated Wipes
- Tuck's Witch Hazel Hemorrhoidal Toilet Wipes
- Kandoo Flushable Wipes
- Clean & Clear Oil Blotting Sheets
- Kleenex Tissue
- Scott's Scrub Cloths (half sheet)
- Scott's Flushable Wipes
- Charmin Flushable Wipes (slight after first ten minutes, none further)

PARTIAL DISINTERGRATION

- Natural Choice Flushable Moist Wipes (33% of product disintegrated within one hour)
- Fresh Brush by Scrubbing Bubbles (25% of product disintegrated within one hour)

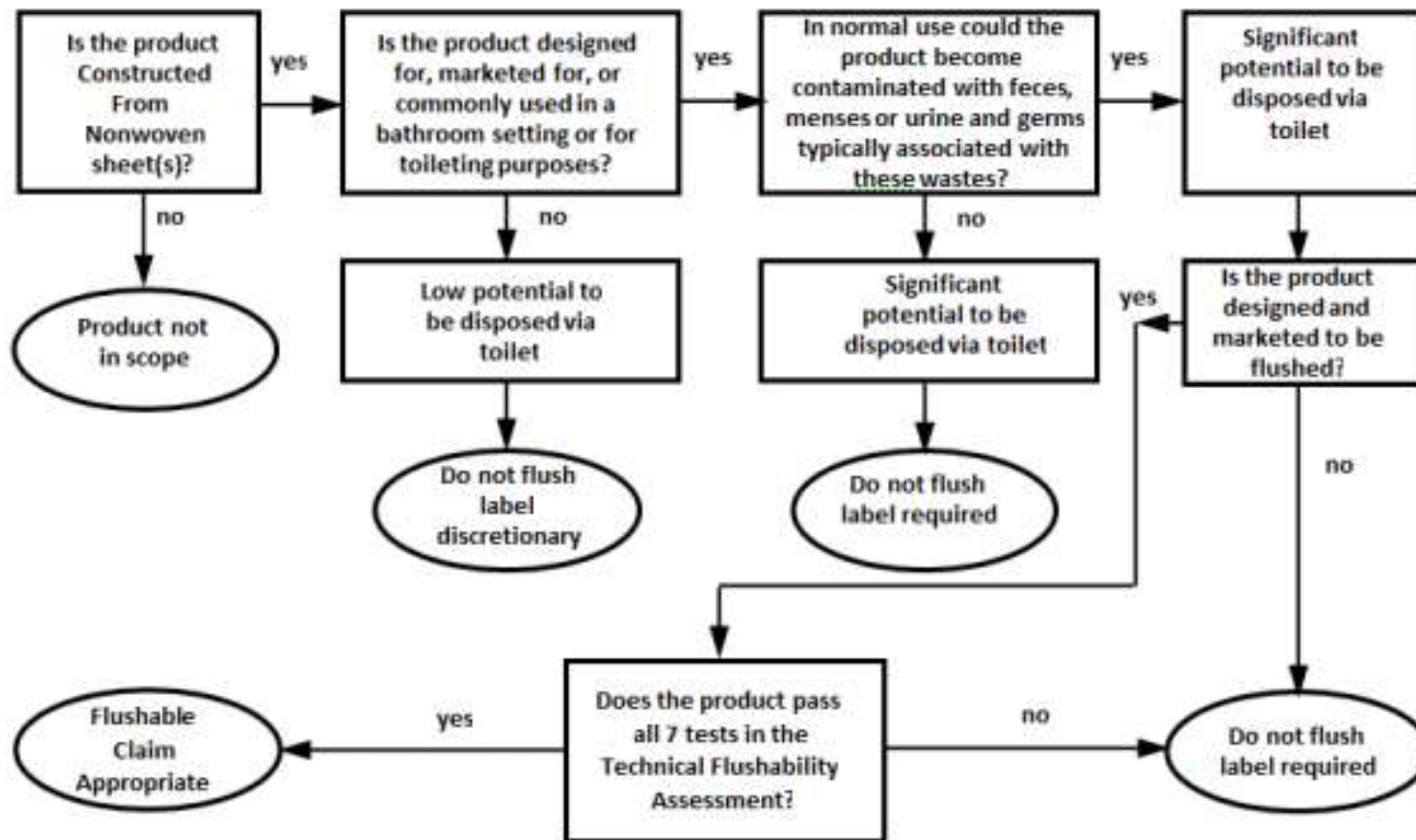


Figure 2: Illustrates the decision-making process for determining whether a product is within the scope of this Flushability Assessment and the labeling requirements specified by the INDA/EDANA Code of Practice.

National Association of Clean Water Agencies (NACWA) Experiment

In the photos: After traveling through a real sewer for 30 minutes, toilet paper (1) has completely disintegrated, while a “flushable” wipe (A) is completely intact:



Source: <http://www.nacwa.org/docs/default-source/resources---public/wipes-one-pager.pdf?sfvrsn=2>

NACWA Experiment

A previous version of the INDA flushability guidelines produced this wipe, which could be flushed 100 times without breaking apart!



TasWater (Tasmania) Experiment

Our long running test shows baby wipes unchanged after 18 months. "Flushable" wipes still holding shape

[#WorldEnvironmentDay](#)
[#cantflushthis](#)

Source: https://twitter.com/Tas_Water



Big Money

For wipe manufacturers, heavy investments in products for adults have resonated with customers. Market research, cited in a [Bloomberg News article](#) last year, suggested that from 2008 to 2013, sales of the moist flushable wipes had grown 23 percent to \$367 million.



DC Water's Nonwoven Disposable Products Act of 2016

- Took effect on January 1, 2018
- The Ordinance requires that wipes only be labelled as “Flushable” if they breakdown “in a short period of time after flushing in the low-force conditions of a sewer system.”
- The INDA pushed Congress to reverse the ordinance but the lobbying did not succeed

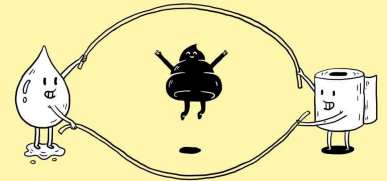




TOILET PAPER

THE ONE AND ONLY
FLUSHABLE WIPE

ONLY PAPER, PEE & POO
BELONG DOWN THE LOO



DON'T FLUSH ANYTHING BUT THE THREE PS.

KNOW
YOUR POOS
& DON'TS

marino

Paper, Pee, & Poo

Focus on the three Ps in customer outreach

What's Next?



Questions?

City of Raleigh
Public Utilities Department
Sewer Maintenance Division
919-996-3245

