FEDERAL COURT OF AUSTRALIA

Australian Competition and Consumer Commission v Kimberly-Clark Australia Pty Ltd [2019] FCA 992

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| File numbers: |  |
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| Judge: | **GLEESON J** |
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| Date of judgment: | 28 June 2019 |
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| Catchwords: | **CONSUMER LAW** – misleading and deceptive conduct – where the applicant alleges contraventions of ss 18, 29(1) and 33 of the *Australian Consumer Law*, being Schedule 2 to the *Competition and Consumer Act 2010* (Cth) (**ACL**) arising out of the respondent’s promotion of flushable wipes – where the applicant alleges that flushable wipes caused harm to household and municipal sewerage systems – whether representations were with respect to a future matter pursuant to s 4 of the ACL – whether flushability representation was false, misleading or deceptive – flushability representation was not false, misleading or deceptive |
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| Legislation: | *Australian Consumer Law*, being Schedule 2 to the *Competition and Consumer Act 2010* (Cth) ss 4, 18, 29(1), 33  *Evidence Act 1995* (Cth) s 140 |
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| Cases cited: | *Aldi Foods Pty Ltd v Moroccanoil Israel Ltd* [2018] FCAFC 93; (2018) 358 ALR 683  *Amaca Pty Ltd (under NSW administered winding up) v Booth* [2011] HCA 53; (2011) 246 CLR 36  *Australian Competition and Consumer Commission* *v Coles Supermarkets Australia Pty Ltd* [2014] FCA 634; (2014) 317 ALR 73  *Australian Competition and Consumer Commission* *v Dukemaster Pty Ltd* [2009] FCA 682  *Australian Competition and Consumer Commission v Giraffe World Australia Pty Ltd* [1999] FCA 1161; (1999) 95 FCR 302  *Australian Competition and Consumer Commission v Prysmian Cavi E Sistemi SRL (No 12)* [2016] FCA 822  *Australian Competition and Consumer Commission v Purple Harmony Plates Pty Ltd* [2001] FCA 1062  *Australian Competition and Consumer Commission v Telstra Corporation Ltd* [2007] FCA 1904; (2007) 244 ALR 470  *Australian Competition and Consumer Commission v TF Woollam & Son Pty Ltd* [2011] FCA 973; (2011) 196 FCR 212  *Australian Competition and Consumer Commission v TPG Internet Pty Ltd* [2013] HCA 54; (2013) 250 CLR 640  *Australian Competition and Consumer Commission* *v Turi Foods Pty Ltd (No 4)* [2013] FCA 665  *Australian Securities and Investments Commission v Cassimatis (No 8)* [2016] FCA 1023; (2016) 336 ALR 209  *Campbell v Backoffice Investments Pty Ltd* [2009] HCA 25; (2009) 238 CLR 304  *Commissioner for Fair Trading, Department of Commerce v Perrett* [2007] NSWSC 1130  *GlaxoSmithKline Australia Pty Ltd v Reckitt Benckiser (Australia) Pty Limited (No 2)* [2018] FCA 1  *McGrath v Australian Naturalcare Products Pty Ltd* [2008] FCAFC 2; (2008) 165 FCR 230  *Reckitt Benckiser (Australia) Pty Ltd v GlaxoSmithKline Australia Pty Ltd* [2018] FCAFC 138  *Roads and Traffic Authority v Royal* [2008] HCA 19; (2008) 245 ALR 653  *Samsung Electronics Australia Pty Limited v LG Electronics Australia Pty Limited* [2015] FCA 227; (2015) 113 IPR 11  *Specsavers v Luxottica* [2013] FCA 648 |
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ORDERS

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|  | | NSD 2124 of 2016 |
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| BETWEEN: | AUSTRALIAN COMPETITION AND CONSUMER COMMISSION  Applicant | |
| AND: | KIMBERLY-CLARK AUSTRALIA PTY LTD (ACN 000 032 333)  Respondent | |

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| JUDGE: | GLEESON J |
| DATE OF ORDER: | 28 June 2019 |

THE COURT ORDERS THAT:

1. The parties approach the Associate to Gleeson J to fix a date for a case management hearing in connection with the applicant’s claims for relief concerning the “Made in Australia” representations.
2. Otherwise the application be dismissed with costs.

Note: Entry of orders is dealt with in Rule 39.32 of the *Federal Court Rules 2011*.

REASONS FOR JUDGMENT

GLEESON J:

1. The applicant (**ACCC**) claims that, between May 2013 and May 2016 (**relevant period**), the respondent (**KCA**) contravened the *Australian Consumer Law*, being Schedule 2 to the *Competition and Consumer Act 2010* (Cth) (**ACL**), by its advertising and marketing of Kleenex Cottonelle Flushable Cleansing Cloths (**KCFC wipes**).
2. “Wipes” are moist towelettes, generally sold in packets or plastic tubs at supermarkets and other retail outlets. “Wipes” come in varying sizes and fabric strengths, and are marketed for a range of uses.
3. The KCFC wipes were marketed as “flushable”, in contrast to other wipe products which were marketed with no reference to flushability or with a recommendation: “Do not flush”.
4. The ACCC contends that, by its advertising and marketing of the KCFC wipes, KCA:
5. engaged in conduct in trade or commerce which was misleading or deceptive, or likely to mislead or deceive, in contravention of s 18(1) of the ACL;
6. made false or misleading representations in connection with the supply, possible supply and/or promotion of its KCFC wipes that KCFC wipes had a particular quality in contravention of s 29(1)(a) of the ACL and/or had particular performance characteristics, uses and/or benefits, in contravention of s 29(1)(g) of the ACL; and
7. engaged in conduct in trade or commerce that was liable to mislead the public as to the nature, characteristics, and suitability for purpose of KCFC wipes, in contravention of s 33 of the ACL.

# Summary of conclusions

1. The ACCC’s case fails, except in relation to a representation that the wipes were “Made in Australia”, which the parties agree was made and was false or misleading.
2. KCA represented that its KCFC wipes were “flushable”, which an ordinary reasonable consumer would have understood to mean that they were suitable to be flushed down the toilet and into sewerage systems in Australia. The KCFC wipes were intended to be flushed down the toilet, consistent with their intended use to remove human faecal matter.
3. The representation was based on the fact that KCFC wipes passed flushability tests set by the third edition of guidelines published by the International Nonwovens and Disposables Association (**INDA**) and the European Disposables and Nonwovens Association (**EDANA**) (**INDA/EDANA GD3 Guidelines** or **GD3**). The guidelines are entitled “Guidelines for Assessing the Flushability of Disposable Nonwoven Products: A Process for Assessing the Compatibility of Disposable Nonwoven Products with Plumbing and Wastewater Infrastructure”.
4. The ACCC’s case was that the “flushability” representation entailed that the KCFC wipes would not cause or contribute to harm to household and municipal sewerage systems, including harm in the form of increased maintenance. In other words, the wipes were compatible with the sewerage systems. The household systems comprise the household drainline and or treatment or septic systems located on the consumer’s property. The municipal system comprises the network of sewerage pipes, pumping stations and wastewater treatment plants.
5. There was some evidence that KCFC wipes have caused harm to household sewerage systems in the form of blockages. This evidence came from KCA’s business records of 28 consumer complaints about household system blockages during the relevant period (including two from consumers in New Zealand). There was no evidence from a consumer or plumber to verify the facts in relation to any of those complaints, or to enable the Court to exclude other causes for the blockages including the inevitable imperfections and defects that exist in the sewerage infrastructure. Further, despite the millions of packets of KCFC wipes sold in the relevant period, there was no evidence from any other consumer or plumber of a household system blockage attributed to KCFC wipes. As KCA observed, they received complaints at a rate of about one tenth of a complaint per million wipes sold.
6. The phenomenon of sewerage blockages pre-dates the invention of the wipe. The evidence showed that sewerage blockages have many causes, not limited to the disposal of “non-flushable” items into toilets. Accordingly, it is not self-evident that a wipe designed to be flushed down the toilet is not suitable for flushing because it has caused or contributed to a sewerage blockage on one or more occasions. Nor is it self-evident that such a wipe is not suitable for flushing because it does not share relevant characteristics of toilet paper.
7. I am not persuaded that the consumer complaint evidence is sufficient to support a conclusion that the KCFC wipes are unsuitable for flushing. If it is sufficient, I do not draw that conclusion because the instances of blockages identified by the complaints are so few in the context of the total sales of the wipes that they are properly characterised as insignificant.
8. There was ample evidence that “wipe” products generally are a significant management problem for municipal sewerage systems, impairing the function of infrastructure and increasing maintenance costs.
9. However, the evidence did not demonstrate on the balance of probabilities that KCFC wipes had caused harm to, or inflicted cost on, any single municipal system in any particular instance. Further, the evidence did not demonstrate on the balance of probabilities that KCFC wipes contributed to the identified problems in municipal sewerage systems.
10. There was a risk of harm to both household and municipal sewerage systems from KCFC wipes that was greater than the risk of harm posed by toilet paper. That risk arose from the fact that KCFC wipes had inferior properties of breakdown and dispersion than toilet paper when flushed. However, the evidence does not reveal the risk materialised except to the insignificant extent revealed by the consumer complaints.
11. The ACCC also contended that the “flushability” representation was a representation “with respect to a future matter” within the meaning of s 4 of the ACL, so that KCA was required to adduce evidence that it had reasonable grounds for making the representation when it was made in order to discharge the evidential burden set by s 4(2). I do not accept that contention. In any event, I am persuaded that KCA did discharge the evidential burden and the ACCC failed to prove that KCA did not have reasonable grounds for making the “flushability” representation.
12. Accordingly, I am not satisfied that the “flushability” representation was false, misleading or deceptive or otherwise contravened the ACL.
13. The ACCC did not pursue its case that the representation also entailed that the wipes did not cause harm to the environment by means of synthetic fibres persisting in biosolids and treated water that is returned to the environment.

# Facts

## Standard of proof

1. The ACCC was required to prove its case against KCA on the balance of probabilities. By s 140 of the *Evidence Act 1995* (Cth) (**Evidence Act**), in deciding whether the Court is satisfied that the case has been proved to that standard, the Court is to take into account:
2. the nature of the cause of action or defence;
3. the nature of the subject-matter of the proceeding; and
4. the gravity of the matters alleged.
5. Contravention of s 29 or s 33 of the ACL may expose a person to the imposition of a civil penalty. It is relevant to take that matter into account in determining whether the allegations of contravention of those provisions have been proved: *Australian Competition and Consumer Commission v TF Woollam & Son Pty Ltd* [2011] FCA 973; (2011) 196 FCR 212 at [8], *Australian Competition and Consumer Commission v Prysmian Cavi E Sistemi SRL (No 12)* [2016] FCA 822 at [42] and *Australian Securities and Investments Commission v Cassimatis (No 8)* [2016] FCA 1023; (2016) 336 ALR 209 at [39].

## Witnesses

1. Generally, the witnesses for both parties presented as credible and reliable.
2. The ACCC adduced evidence from Andrew Drinkwater, a civil engineer, and Principal Engineer and Contract Manager at Water Research plc. Mr Drinkwater evidently had substantial experience of relevance to the performance of materials in the sewerage system and his affidavit evidence expressed opinions based on that experience. However, despite the requirement of the Court’s Expert Evidence Practice Note GPN-EXPT, Mr Drinkwater did not agree to be bound by the Harmonised Expert Witness Code of Conduct. There was no evidence as to the particular circumstances of this omission and there was no suggestion that Mr Drinkwater had refused to agree to be bound by the Code.
3. KCA did not object to the admissibility of Mr Drinkwater’s evidence on this basis but submitted that he was not an impartial witness on the basis of his company’s substantial work for, and consequent reliance upon continued engagement from, wastewater utilities, manufacturers of sewerage equipment and assets used in utilities and regulators of utilities. Mr Drinkwater’s work has included providing evidence for and assisting wastewater utilities in court proceedings.
4. Mr Drinkwater also stated that his work has involved advising about six manufacturers to assist with product testing to determine the likelihood of potential new products passing flushability criteria, including by testing products against a test protocol published by UK Water Industry Research Limited (**UKWIR Test Protocol**) and giving advice to product developers on what needs to change to make their products more acceptable to the water industry. The UKWIR Test Protocol is a set of nine tests used to assess product performance in a variety of situations that represent certain aspects of a wastewater system, co-authored by Mr Drinkwater.
5. KCA made several other criticisms of Mr Drinkwater’s impartiality and credibility, including that he displayed a propensity in the witness box to advocate for his preferred position; that he is in a “conflicted position” in giving evidence about the INDA/EDANA GD3 Guidelines by reason of his co-authorship of the competing UKWIR Test Protocol; and that he gave evidence about matters outside his expertise (particularly the question of the composition requirements for flushable materials).
6. My impression was that Mr Drinkwater was an honest witness. However, the matters set out above are reasons to approach his evidence with a degree of caution.

## Wastewater system

1. Generally, I understood the parties to use the expressions “wastewater system” and “sewerage system” interchangeably.

### Elements of the system

1. The ACCC adduced evidence that the basic design of Australian and international sewers is the same. In particular, Australian sewerage systems are relevantly similar to United States and English sewerage systems. Thus, for example, Mr Drinkwater treated his English experience as relevant to the Australian experience. To the extent that it was appropriate for KCA to rely on the INDA/EDANA GD3 Guidelines at all, there is no good reason to doubt that it was appropriate to rely on them in marketing products as flushable in Australia.
2. The following explanation of the system is based on KCA’s written submissions, which were not disputed in this regard.
3. When a toilet is flushed, items in the toilet that are not too large, too heavy or too voluminous to pass through the toilet are flushed into a household or commercial drainline. The flushing action releases a volume of water from the head tank, which forces the water and material in the toilet bowl to begin to circulate and flow down and through the toilet’s submerged trap.
4. Within the drainline, wastewater from shower and bath drains, kitchen and laundry sinks, wash basins, and dishwashers and washing machine drains, joins the flow of material flushed from the toilet and travels through the drainline, which may include turns, junctions with other drain pipes and vertical drops.
5. In urban environments, the drainline joins the municipal sewer pipes at a connection point near the edge of a private property.
6. Wastewater flows are primarily comprised of water, but also include a wide variety of organic and inorganic waste materials and substances. Apart from wastewater and the “Three Ps” (pee, poo and (toilet) paper), waste materials and substances found in the wastewater system include food scraps, fats, oils, grease (from kitchen sinks and dishwashers), hair, sand, grit, dirt and soaps (from showers, baths and wash basins), lint (from washing machines), paper towels, facial tissues, plastic, wipes (of various types), feminine hygiene products and contraceptives and, particularly during wet weather, groundwater and stormwater flows that enter the system.
7. Wastewater systems in Australia are predominantly gravity-fed, that is, the pipes are laid at a gradient sufficient for the pipes to be “self-cleansing”, which means there is sufficient energy within the flow of water in the pipe to carry solids from a customer’s property into the main sewer and onto the treatment plant. This generally provides enough turbulence to prevent solids from settling out of the wastewater flow. The flow of wastewater through the pipes is disturbed by drops, twists and turns. As the pipes flow downhill, the diameter of the pipes generally increases as the pipe is joined by other pipes and carries wastewater flows from other properties and other sewer pipes.
8. Often, sewer pipes pass through one or more pumping stations on the way to a treatment plant where the level of the pipes reaches an inefficient depth and needs to be pumped up to a higher level so as to resume the gravity-fed flow. The larger municipal sewer pipes will then typically converge at a final “headworks pumping station” at the entrance to the treatment plant.
9. Some pumping stations include screens (which catch and remove material from the flow) or grinders (which cut material into smaller pieces and pass it downstream) located near where wastewater first enters the wet well in the pumping station and before the wastewater reaches the pump itself. Wet wells within a pump may include features designed to deal with solids in the wastewater, including the turbulence of water flowing into the wet well that can break up a solid mass that has formed in the wet well, corner fillets (to prevent dead spots), sloping floors, mixers (to keep solids in suspension), and grit traps. Wet wells are periodically cleaned out, either manually or through an automated process, to remove settled solids at the bottom of the wet well and floating materials at the top. Wastewater passing through a pump station is pumped through by an “impeller”, a rapidly rotating (720-1,800 rpm) propeller like component that is specifically designed and rated by manufacturers to successfully pump solids-bearing liquids of at least a specified minimum size.
10. Multiple considerations affect the design for a pumping station. For example, Colin Hester, Manager, Commercial Water and Trade Waste of Queensland Urban Utilities (**QUU**), a statutory body that supplies drinking water, recycled water and wastewater services to South East Queensland, stated:

16. Many of QUU’s pumping stations have had their screens removed, due to the risk of overflow when a screen becomes covered in debris including wipes, and also due to the maintenance burden imposed by the requirement to regularly clean the wipes off the screens by manual processes. The risk of pumps fouling or rocks striking and damaging the impellers has been identified by QUU in many of these instances as being a lesser operational risk than repeated overflows of sewerage. For example, about 4 years ago, when I held the role of Manager Source Control and Environmental Compliance … I was involved in reporting environmental overflows at pump stations sometimes caused by blockages on screens. In some instances, the preventative action taken was to remove the screens.

17. [S]creens are “intended to prevent solid materials in the wastewater from potentially becoming clogged within pumps, valves, or piping located downstream”. From QUU’s perspective, the only purpose of having screens installed at the pumping station is to protect QUU’s infrastructure … This is consistent with the intent being to protect the equipment and to maintain the flow, rather than to perform some type of treatment function of separating solids from the wastewater for collection (as in the case with the function of screens fitting at treatment plant).

1. Most wastewater treatment plants have screens (inclined vertical bars or round openings) located near where wastewater first enters the treatment plant. This is intended to protect the plant’s downstream equipment, including pumps, valves and piping. The screens catch larger solid material (including faecal matter and toilet paper) and remove it from the flow, with the collected material taken to landfill. Typically, the screens at the treatment plant clean themselves automatically. There is then a grit removal process at the treatment plant involving inorganic materials, such as grit and sand, settling (via gravity, aeration or a vortex motion within a tank) and being pumped out of the tank and disposed to landfill, whilst the organic material flows on to other treatment processes. Primary settling tanks then allow solids to settle into a sludge at the bottom of the tank (where the sludge moves on to biological treatment and disinfection), whilst a mechanical moving skimmer removes floating materials (such as grease, scum and small plastics) off the top of the wastewater in the tank.
2. In the case of QUU, Mr Hester said:

22. Screening systems are always included at QUU’s wastewater treatment plants. These are finer screens than those installed at the relevant QUU pumping stations, being 3-6mm screens. At the wastewater treatment plant, the screens are the first stage of the treatment process, as well as being there to perform the function of protecting the equipment within the plant.

23. In respect of the pumping stations the imperative is to protect the assets and keep the network moving, whereas, at treatment plants, the objective is to protect the assets and to separate the wastewater from the solids contained within it. It is for these reasons that the screens are finer than those that might be installed at a pumping station … so that more debris is filtered out of the wastewater.

24. These screens at the treatment plant are also automatically raked, as opposed to the manual process applied at those QUU pumping stations that have screens installed. However, sometimes human intervention is required, for example, when wipes, rags or other debris, including feminine or other personal hygiene products, accumulate and cannot be dislodged by means of the automated process.

1. Bernie Sheridan, Manager, Treatment at Sydney Water Corporation, a statutory body that supplies drinking water and wastewater services to greater metropolitan Sydney, expressed the view, which I accept, that if a wipe takes longer than 30 minutes to break down in the system, it is possible that it might arrive intact at the plant and it is also possible that such a wipe can bypass the screens at the entry point to the treatment plant.

### System design

1. There was evidence, in the form of assertion (for example, by Gary Hurley, Manager, Networks at Sydney Water and Mr Drinkwater), that the sewerage system is designed only for the removal of urine, faecal matter and toilet paper (and trade waste subject to limits). To the extent that the sewerage system is or forms part of the wastewater system, this cannot be correct because, as explained at [30] above, it is designed to receive wastewater from kitchens, laundries and bathrooms. This is significant because it results in the introduction of materials such as fat, oils, grease, detergents and hair which contribute to the risk of blockages.
2. Evidently, the Australian sewerage system as a whole has evolved over time. In all likelihood, parts of the system were designed and constructed well before the introduction of KCFC wipes onto the Australian market and so could not have been designed for the disposal of those wipes. It is also evident that the sewerage system is equipped to handle the inevitable incursion of substances and products that are not intended to pass through the system. Mr Hurley explained that the system is nevertheless “designed to cope with misadventure, damage, the entry [of] foreign material that is not its designed intent”, and that the system is therefore designed to “have an element of resilience”. To that extent, the system cannot be said to be designed only for the removal of the Three Ps.
3. Similarly, Glenn Wilson, General Manager of Infrastructure Services at Yarra Valley Water (**YVW**), a utility which services approximately 1.8 million customers, gave evidence that the wastewater system is designed to accommodate “the odd occurrence” of items other than human waste and toilet paper being flushed down the toilet, but that the system is not designed to have those types of items “regularly pass through the system”. Mr Wilson stated that YVW “understand[s] people from time to time do the wrong thing”.

### System conditions

1. Across Australian sewerage systems generally, there is a broad range of conditions and distances travelled from the point of the toilet to the treatment plant. For the purposes of assessing flushability, it would not be appropriate to assume a perfect system. Like most infrastructure, the sewerage system is subject to wear and tear and can be expected to include irregularities and imperfections that are potential sites for build ups and blockages.
2. One of KCA’s witnesses, Professor Ned Paschke, agreed that the ordinary sewerage system will contain defects and “a properly functioning sewerage and wastewater system will have pipes at different stages … from newly laid pristine pipes to older sections that might be close to failure and various stages in between.” Professor Paschke is Professor of Practice and Honorary Adjunct Professor in the University of Wisconsin-Madison Department of Civil and Environmental Engineering. He is an expert in the fields of wastewater, water and environmental engineering and management.
3. System conditions may also be affected by usage. Mr Drinkwater identified the following scenario:

[I]f solids (including wipes) remain in the drainline for over one day, they can: (a) start to become septic and in doing so emit unacceptable odours; and (b) start to dry out and stick to the pipe wall, making it more difficult for them to be picked up in the flow in the pipe again (that is, re-entrained), and to be moved on in successive flushes.

1. Peter Lortscher, a senior research scientist at Kimberly-Clark Corporation (**KCC**) and head of its Fate of Materials Centre (**FOMC**), agreed that it is possible that a product can remain in a drainline with very little water for a long period of time and may even dry out, and that this may affect its “rate of dispersability”.
2. Mr Wilson gave the following evidence concerning defects in the Melbourne and YVW sewerage networks:

9. …. The reality is that in a city such as Melbourne, the sewer network was built over an extended period of time using a range of material such as concrete, clay, and plastics. Each of these materials are susceptible to different types of failures. For example concrete and clay pipes often develop cracks and joint failures due to external loading and ground movement, which allow tree roots to infiltrate. Plastic pipes (PVC and PE), which are more durable and resistant to tree root intrusion were only introduced on a large scale as part of the YVW network in the early 1990s and represent approximately 23% of the total pipe network length.

10. Furthermore, environmental conditions also contribute to defects developing. For example, almost all of YVW’s service area contains clay soils, which are highly reactive to changes in soil moisture content between summer and winter meaning they expand and contract. This ground movement can often result in structural failure.

1. Mr Drinkwater explained the following potential for blockages:

What we’re talking about is items that get caught up on maybe a minor joint imperfection, a minor tree root. That’s where the problem occurs. If – if items get caught on something in the drainline, then that has the potential to cause a blockage.

### Toilet paper, wipes and other products found in wastewater

1. Toilet paper is made of a blend of short wood pulp fibres which range from 1-2mm in length. Toilet paper typically has very low wet strength, with no binding agent or wet strength agent, and begins to break up after becoming wet. KCA admitted that toilet paper loses its strength in water faster than KCFC wipes.
2. Other products found in wastewater are referred to at [32] above. A Sydney Water survey found that consumers admitted to flushing a variety of wipes including “hand and body cleansing” wipes, “facial cleansing” wipes, “household cleaning wipes”, “baby” wipes and “floor cleaning (electro-static)” wipes as well as disposable nappies and cotton/ear buds. KCA consumer research evidence indicated that consumers frequently flush products into the sewerage system, apart from wipes marketed as “flushable”, including facial tissues, paper towels and feminine hygiene products.
3. By way of illustration of the kinds of KCA products that were marked “Do not flush”, Huggies Baby Wipes, Kleenex Sensitives Wipes, Kleenex Anti-bacterial Wipes and Depend Cleansing Wipes were all labelled “Do not flush”.
4. Different types of wipes have varying degrees of wet strength. Mr Drinkwater described baby wipes as “very strong plastic wipes”, while cosmetic wipes are “far less strong than baby wipes”. Household cleaning wipes were said to be “very strong wipes” but “don’t feature a great deal in what we find in sewer blockages or pump plugs”.
5. Baby wipes and potty trainer wipes are made up of a combination of regenerated cellulose (~70%) and plastic fibres (~30%), often with very long fibres up to 25mm in length. These longer fibres form very strong bonds and have permanent wet strength so that they do not break down in moving water. They also have a tendency to entangle or rope together due to their long fibres. Similarly, household cleaning wipes, electrostatic cleaning cloths and industrial cleaning wipes are typically comprised of blends of plastics that retain considerable permanent wet strength.
6. Mr Lortscher stated that the “basesheet” (the substrate of all nonwoven hygienic wipes) used in “non-flushable” wipes such as baby wipes is far stronger than the basesheets used in a flushable wipe that passed INDA/EDANA GD3 Guidelines.
7. Paper towels and facial tissues are made of a blend of short wood pulp fibres that range from 1-2mm in length. However, a permanent wet strength resin is added to form covalent bonds rather than hydrogen bonds, which provides permanent wet strength and means that they do not break apart easily when wet. In contrast, the KCFC wipes did not contain any such chemical binder. Mr Drinkwater stated that facial tissue has greater wet strength than toilet paper but is not as strong as paper towels.

### Comparing KCFC wipes and toilet paper

1. The ACCC relied on a demonstration by Sydney Water of the different behaviour of toilet paper and KCFC wipes (**Sydney water agitation demonstration**). The demonstration involved comparing the behaviour of the two products once submerged and agitated in water. The ACCC made the following observations of the demonstration:
2. While between 89.9% to 92.0% of the toilet paper could pass through a sieve at the end of the period of agitation in water, only between 4.5% to 12.2% of the various KCFC Wipes could pass through the sieve.
3. One can see the different manner and timeframe in which the toilet paper breaks down when viewing the video recording of the water agitator testing.
4. None of the ACCC’s expert witnesses endorsed the demonstration as an appropriate test for assessing flushability. In particular, Mr Stonehouse, a technical specialist at Sydney Water who conducted the test, was unable to comment on the utility of the test for the purpose of understanding the operation of sewerage conditions. Mr Stonehouse confirmed that the test has been used for the educational purpose of “demonstrate[ing] the difference between how a wet wipe product and toilet tissue would break up”.
5. It is difficult to make much of the ACCC’s observations. The ACCC put the evidence forward only as a demonstration of how the different products act under similar forms of agitation.

### Collection studies

1. From time to time, water authorities have collected waste from parts of the sewerage system to study their contents.
2. In its closing submissions dated 1 October 2018, although referring to the studies as “imprecise and contestable in nature”, the ACCC contended that the collection studies “confirm and are consistent with [a finding that] flushable wipes … are represented proportionately in the material that is resulting in harm to wastewater networks across Australia (and indeed globally).” The ACCC retreated from that contention by its closing submissions dated 2 October 2018 and in oral closing submissions. Ultimately, the ACCC’s position was that it did not rely on the collection studies which, it submitted, were “not reliable, probative or relevant to the issues in issue in the proceeding”.
3. Dr Greg Ryan, Manager, Utility Excellence at Water Services Association of Australia (**WSAA**), the peak body representing the urban water industry in Australia, expressed several reservations about the utility of collection studies notwithstanding that, as explained below, his organisation had embarked upon a path of conducting such studies in April 2015. Dr Ryan initially considered the task of effective sampling as “relatively difficult” but he has since formed the view that “it is difficult to obtain a representative sample of material from the sewer network and … even if this can be achieved, identifying material removed is not straightforward”.
4. Mr Drinkwater expressed the view that the information collected for the UK Water study, referred to below, was “very valuable”, albeit not the only information to be taken into account in determining the causes of sewerage blockages. I accept that evidence. In particular, I accept that collection studies may be unable to detect a problem in fact caused by flushable wipes. However, I did not understand the ACCC to suggest that collection studies may falsely implicate products that can be identified from a collection study as products that cause or contribute to blockages.

#### Sydney Water

1. In late 2015 and early 2016, Sydney Water conducted a study with the object of “determination of the wipe material found to be blocking sewer pipes and coarse screens”. The test method document stated that there was “currently limited data on the nature of these materials within Australia. Obtaining more information will allow the industry to better understand the extent of the problem, characterise the materials that are responsible for the interferences and provide quantitative information to ultimately solve the problem”.
2. The laboratory manager who conducted the study, Charlie Pierce, did not give evidence. He had retired from Sydney Water by the time of the hearing and was probably available, if either party had chosen to call him. In a 6 August 2015 email, Mr Pierce noted that he had “completed a few batches of wipe identification and found very low numbers of flushable wipes. The flushable wipes are difficult to differentiate from paper towels (the dominant component at both Malabar and Penrith).” Mr Pierce resolved to consider further information on wipe identification before resuming the survey.
3. By mid-October 2015, Mr Pierce expressed greater confidence in his ability to distinguish between paper towels, flushable wipes and other personal hygiene products and decided that he was ready to resume testing.
4. In February 2016, Mr Pierce expressed the conclusion that “‘[f]lushable’ wipes are not a serious issue for SWC [Sydney Water Corporation], the paper towels and in some cases large industrial wipes are a bigger problem”.
5. The immediate response of Dr Sherry Cabardo-Oclarit, Business Customer Representative, Sydney Water, was that Mr Pierce’s report showed that “paper towels is the bigger issue compared with flushable wipes”.
6. At the hearing, Dr Cabardo agreed that the average of flushable non-woven wipes identified across Mr Pierce’s studies was about 2% of the material analysed. For a similar result in the UK Water study (considered below), Dr Cabardo agreed that flushable wipes were of “negligible significance” in that study. However, Dr Cabardo did not make a similar concession in relation to the Sydney Water study which she considered to be preliminary only, and “not representative of the whole area of Sydney Water’s operations”.
7. Despite moving away from the study in her evidence, Dr Cabardo had relied on it at a March 2016 business customer forum, including to say that “[p]aper towels and large industrial wipes being flushed are also causing blockages in the system”.
8. Thus, at the least, Dr Cabardo was prepared to accept that the Sydney Water collection study is evidence that paper towels and large industrial wipes are causes or contributors to blockages in the Sydney sewerage system.
9. The ACCC referred to an observation in the test method for the study that “[i]n most cases, it is impossible to distinguish between personal hygiene wipes and flushable wipes”. However, as KCA observed, Mr Pierce did apparently draw such a distinction after obtaining additional information on “wipe identification”. Without evidence from Mr Pierce, Dr Cabardo’s observation in re-examination that the combined results for the “personal hygiene” and “flushable” wipe category are “notable” does not have significant weight.

#### QUU

1. In July 2016, Mr Hester conducted a test at the Sandgate Sewage Treatment Plant to estimate the amount of non-destructible wet wipes entering the plant. The test was based on a representative sample of four litres of “screening” with a wet weight of 6.2kg, removed from the inlet screen at the plant.
2. By separating and reviewing the material and counting the entirety of the wet wipe pieces comprising the “screenings” sample, Mr Hester estimated that approximately 1 litre (wet volume) of the sample with a wet weight of 630g comprised wet wipes. Mr Hester concluded that QUU’s estimate that 120 tonnes of wipes are removed from QUU’s sewerage network each year was conservative.
3. In an email dated 14 July 2016, Bob Phillips, Supervisor Microbiology, referred to the composition of wipes obtained in this test. His email noted that 23 wet wipes had been isolated, and stated:

All wipes isolated were very difficult to tear and seemed much stronger than the pack of flushable wet wipes purchased for visual comparison. SAS staff supplied non-flushable wipes today for comparison, and the wipes isolated from the Sandgate sample seem much closer to those in appearance and structure …

1. In cross-examination, Mr Hester agreed that this July 2016 data provided no evidence of flushable wipes being a problem in QUU’s system. He agreed that the only information that he had about the wipes found in the test, as to their kind, suggested that they were probably not labelled as “flushable”. Mr Hester also agreed that he had never had any evidence that wipes, which were not baby wipes but had passed the GD3 protocols and were sold as flushable, were among the wipes that he observed causing problems in QUU’s wastewater system. Mr Hester emphasised that his test was seeking to understand the mass load of wet wipes entering the treatment plant, in circumstances where he had earlier expressed the view that there is not very much difference between a so-called flushable wipe and a non-flushable wipe.

#### UK Water

1. There was also evidence of a collection study commissioned by Water UK in 2017 and co-authored by Mr Drinkwater. Water UK is a membership organisation that represents all major statutory water and wastewater service providers in England, Scotland, Wales and Northern Ireland, working with government, regulators and stakeholder organisations to develop policy and improve understanding of the business of water on behalf of UK water companies.
2. The study was the largest and most thorough of its kind to date in the UK, involving about 50 blockages.
3. The report’s conclusions included the following:

1) The majority of the sewer blockage material recovered comprised of non-flushable wipes that were not designed to be flushed and should not have been disposed of via the WC. Baby wipes accounted for over 75% by weight of identifiable products. Surface wipes, cosmetic removal wipes and feminine hygiene products accounts [sic] for approximately 20% by weight of identifiable products.

2) The products recovered that were designed to be flushed accounted for a small proportion of the products recovered – Approximately 0.88% by total weight and 1.9% by weight of products that could be identified. However, it is accepted that during the blockage recovery process some toilet tissue and other weaker material is lost in the blockage removal process.

3) The analysis of the samples collected at wastewater treatment works inlets shows a similarity with the items recovered from the sewer blockage samples. This suggests that the items causing/present in sewerage blockages are the same types of items by intended use and that they remain intact as far as the wastewater treatment works.

4) The majority of material in pumping station clogs was an unidentifiable mass of wipes. However, a single pumping station clog where individual products could be recognised, showed that it contained a higher proportion of non-flushable wipes than sewer blockages – 95% as opposed to 75% in sewer blockages. There was limited flushable wipe material (0.09%) identified in the pump clogs in this single sample. Experience suggests that this is because sewage pumps are able to mechanically break the flushable wipes and pass them downstream.

5) The analysis of features associated with blockage locations, for which sufficient data was provided, showed a wide variability in the reason or the blockage having formed:

* 11 were the result of wipes being flushed via toilets into drainage systems with features which are integral to drain and sewer systems. These features include interceptor traps, backdrops, 90º bends etc.
* 4 were the result of wipes being flushed via toilets into drainage systems which contained unavoidable debris, such as gravel/sediment deposits).
* 1 was the result of a sewer defect that was in need of repair.
* 6 were due to inappropriate disposal practice; the flushing of a dishcloth, a curtain and at 4 sites, excessive volumes of wipes.
* 3 were at locations where, despite adequate information being returned from site, there was no obvious cause.
* 3 of the 7 pump clogs recovered were caused by material (clothes etc.) being disposed of to the sewer system.
* For the remaining 20 sewer blockages insufficient data was available to assess the features at the blockage locations.

1. In considering the percentages of the products recovered, it is relevant to note that the study samples were processed by being “gently rinsed with tap water to remove organic material and the bulk of toilet paper captured with the blockage”. The report noted that “dispersible wipe material may also have been washed out during this process as it is similar to toilet paper, although care was taken to retain any of this material if it was identified”.
2. The UK Water study contains nine recommendations, including the following single recommendation concerning products labelled as flushable:

5) Polypropylene or polyethylene fibres should not be included in any product labelled as flushable. This is because the majority of the items found in the sewer blockage and pump clog samples are composed of these materials.

1. KCA conceded that the KCFC wipes’ bicomponent fibres were composed of polypropylene or polyethylene.
2. In cross-examination, Mr Drinkwater confirmed that the study did not identify flushable wipes as causing blockages but qualified this observation by saying that this does not mean that flushable wipes do not cause blockages.
3. Mr Drinkwater gave evidence that the finding that about 2% of the material examined was categorised as “flushable” was “hardly negligible” when considering the total volume of wipes that are flushed each year. However, he said that “[i]f you’re looking at where the large proportion of customer education needs to be, then clearly that’s suggesting that baby wipes and such are the main issue”.
4. Mr Drinkwater explained the difficulty with capturing intact blockages in the network because of the tendency for them to break up under the pressure of the flow once dislodged. The ACCC also noted that Mr Drinkwater clarified that this study did not include an assessment of blockages occurring “in the private pipes right next to the house”.
5. The Water UK report indicates that baby wipes, surface wipes, cosmetic wipes and female hygiene products are significant contributors or causes to sewer blockages in the UK. The report also suggests that it is often difficult to determine the cause of a sewer blockage.

#### Uncompleted studies

1. KCA submitted that it was significant that none of the ACCC, the water utilities and WSAA, have produced a more comprehensive collection study than those identified above, or any other study or research directed to the impact of “flushable” products on sewer networks.
2. WSAA has 75 member organisations including 57 publicly owned water utilities; three private water supply companies; two international water utilities; eight consultant members; and five stakeholder bodies with interests allied to the urban water industry. In April 2015, WSAA conducted a “Wipes Forum” in collaboration with the Australian Food and Grocery Council (**AFGC**) and Accord Australasia Limited (**Accord**), the national industry association representing manufacturers and suppliers of hygiene, cosmetic and specialty products, their raw material suppliers and service providers. Following the forum, WSAA published a media release entitled “Water and wipes industries come together to tackle issue”. Relevantly, the media release stated:

As a result of the forum, the three associations will lead further work in confirming the source of material in sewers, considering ways to better educate the community and participating in the development of an international standard relating to flushable products.

…

We are pleased the industry wants to work with us on this issue. We are working towards a solution that will avoid additional long term costs to water utility customers and adverse impacts on the environment”, said Adam Lovell, WSAA’s Executive Director.

“The wipes and hygiene industry welcomes this opportunity to commence collaborative discussions with the water industry. Our first priority will be to gain a better understanding of all dimensions of this issue to maximise the effectiveness of any solutions brought forward” said Craig Brock, Accord’s Policy Director.

“This work will develop a strong evidence base to determine what products are causing concern and what role companies can play in contributing to addressing this challenge”, said a representative from the AFGC.

1. In March 2017, KCA was told that there were four Australian water utilities currently conducting collection studies. In July 2017, the AFGC was informed that WSAA was looking to share results with AFGC and its members once a peer review had been completed.
2. Dr Ryan gave evidence of three collection studies, undertaken by QUU, Watercare (a New Zealand utility) and South Australia Water. His evidence was that results have been obtained in each case, but only published for the Watercare study. The results were not published because WSAA’s members were not “comfortable” that the results were correct or valid, and they were not sure that the method was right and that the results would not be misconstrued. Dr Ryan suggested that this proceeding had caused some reticence on the part of WSAA’s members, which I took to be reticence to reveal the results of collection studies.
3. KCA submitted that the proper inference to be drawn is that those best placed to assess the matter (because they have conducted the studies and obtained the results) are convinced that the unpublished results of the collection studies, when tested in court, either would provide no evidence that GD3 compliant products were incompatible with their systems, or would produce evidence that they were compatible. I draw the inference that the unpublished material does not assist the ACCC’s case.

### Risks posed by wipes and anecdotal evidence of harm caused by wipes

1. If a product does not break down quickly in a sewer or septic system, it can cause blockages and clogging. Mr Lortscher agreed that the “dispersability” of a product is critical in determining whether it might cause a problem in the sewer and household drainline.
2. As a matter of logic, the more quickly an item disperses after flushing, the lower the chance that it will catch or “snag” on an imperfection in the system as it travels towards the treatment plant.
3. Except where I have identified otherwise, the evidence and findings set out below refer to wipes generally, and not to wipes of any particular size or composition or to KCFC wipes (or GD3 compliant wipes) in particular. Further, the evidence generally does not address the likelihood of the risks identified.
4. There was a dispute between the experts about whether it is necessary for a product to break up to be compatible with a properly functioning household toilet and drainline system. One of KCA’s experts, Dr McAvoy, expressed the view that this was unnecessary. In his view, all that is required is that the product can be transported through the drainline pipe before entering the municipal wastewater collection system or an onsite wastewater treatment system. In support of his view, Dr McAvoy referred to tests which showed that toilet paper stays intact as it passes through the household drainage system due to very low velocities in the household drainline.
5. Mr Drinkwater disagreed, identifying the following as relevant to an assessment of flushability:

17.1 [T]he likelihood of wipes snagging on minor defects, which are not so significant as to undermine the functionality of the system, but which represent a reality of actual sewerage conditions. This is problematic because if a wipe becomes snagged on any such defect, it must be able to break up and dislodge from the snag to avoid presenting further impediments to the functionality of the system. If this does not start to break up relatively quickly other material can collect toilet tissue and faeces around it, which do not pass over the wipe and keep on travelling down the pipe, but which instead become lodged where it is. This is in contrast to a pipe without a snagged wipe where the toilet tissue and faeces just slide along the bottom of the pipe. The explanation is that a snagged wipe adds additional resistance or friction on the invert (bottom) of the pipe, which stops the sliding action (this is referred to as the “sliding dam action”);

17.2 [T]he problem of intact wipes, or largely intact wipes, covering or “blinding” screens in the wastewater network; and

17.3 The reality that foul or combined sewer pipe leading from a property normally carry very little flow (“combined” sewer pipes are those that carry both household and roof drain flows, whereas “foul” pipes only contain household flows). Heavier and intact wipes are likely to settle in the pipe once they are more than 10 or 15 metres from the flush input. The wipe may or may not move further with successive flushes.

1. Both Dr McAvoy and Mr Drinkwater evidently accepted that there is relatively little turbulence in the household drainline environment. Consistent with this, Mr Drinkwater’s unchallenged evidence was that most blockages within the sewerage system occur in small household pipes. Mr Drinkwater said that “the major issues with wipes are blockages in sewers, and those often occur well before you get to pumps”, referring to the “smaller sewers immediately after leaving the house”. His evidence was that “90 percent of blockages occur in pipes around the house and leading from the house within the first, say, hundred metres”.
2. If the wipe does not break down and passes through the household drainline intact, it presents a risk that it will cause or form part of a blockage as the wipe is transported through the system.
3. Mr Drinkwater’s evidence was that the vast majority of pump clogs are caused by wipes. Further, based on his experience and research, Mr Drinkwater expressed the view that over 50% of all major sewerage blockages in the UK that need to be cleared and removed have wipes as a major component of that blockage. While some of these blockages may be due to issues concerning the state of repair of the pipes, the vast majority are in sewers that are otherwise serviceable.
4. Mr Wilson of YVW suggested that the main issue is “not that the wet wipe will be flushed into the municipal system, but that it moves slowly as it does not break down and it is therefore more likely to combine with other materials such as fats, oils and other non-biodegradable materials (such as other wet wipes), which can cause blockages”.
5. Mr Wilson’s evidence was that, while it is possible for a wipe to be transported intact (or not broken down) through a wastewater network, in that event it will present problems in terms of:
6. maintenance, that is, removing the wipes, as part of the debris (which includes faecal matter and toilet paper) that accumulates on the screens resulting in increased maintenance costs borne by the wastewater authority;
7. risk of damage to plant equipment (for example, the risk of wipes getting tangled or forming a ball with other matter, which can result in increased maintenance, repair and replacement costs to be borne by the wastewater authority); and
8. treatment processes (that is, the question of how to deal with wipes, or wipe fragments that bypass the screens and enter the treatment plant).
9. Mr Drinkwater referred to “cases where so-called flushable wipes will clog together in a sewer and come down as a snowball. And when that happens, that could kill a pump. But the – in the majority of cases, it is going to be baby wipes or similar”. Mr Drinkwater clarified that these “so-called flushable wipes” may or may not be wipes that had satisfied the GD3 protocol. Thus, I do not treat this as evidence of the potential behaviour of the KCFC wipes.

#### WSAA

1. In an affidavit, Dr Ryan said that, since 2003, the wastewater industry, including in Australia, had observed that “intact flushable wipes” are an issue in the sewerage network in at least three ways:
2. they rope and block on pumps;
3. they snag on irregularities on the pipe surface within the sewerage network (not just on the householder’s premises); and
4. they can be discharged to the environment during high flow events.
5. Dr Ryan explained that:

[S]nagged material can lead to the accumulation of material behind the snag including faeces, toilet paper and fat from cooking and other sources. When this material accumulates in a sewerage pipe it behaves in a similar manner to a snowball, effectively combining these larger intact wipes with fats and other material to form congealed masses of material in the sewer, commonly known as fatbergs.

1. However, in cross-examination, it emerged that the WSAA did not have evidence that “intact flushable wipes” were an issue prior to the April 2015 forum. Dr Ryan gave evidence about the matters known to WSAA at that time:

[W]e were encountering wipes. So it was anecdotal. There wasn’t scientific evidence. When people pull[ed] pumps out of pump stations, they found large amounts of wipe material around it, and also when there was blockages associated with tree roots and other things within the sewer network.

#### New South Wales

1. Sydney Water experiences approximately 20 blockages within sewage pumping stations per month. There is no reason to doubt that wipes and other non-wipe materials contribute to these blockages.
2. Mr Hurley’s evidence was that wipes have significantly contributed to damage to customers’ pipes and Sydney Water’s systems in the following ways:
3. Blockages in customers’ private pipes where there is a lower flow of water (water only flows when toilets are flushed), as these materials accumulate. Material becomes caught on any imperfections in the pipes including root material or joins.
4. Blockages in Sydney Water’s smaller pipes. Material catches in imperfections in the system where the hydraulics (water flow) is not perfect. In particular, grit and rubble can accumulate in the pipes which the wipes can catch onto.
5. Blockages in pumping stations. Where material does not break up swiftly it can catch on the pumps and lock them or the material may settle to the bottom of wet wells, thus reducing their capacity and using more energy. This requires the material to be manually removed and controls and sensors to be fixed.
6. Material gets caught in screens at wastewater treatment plants. This material then needs to be removed manually. In storm events, this material can be picked up and deposited on the screens in a large mass, which also can block the screens and in certain cases can bypass the screens and become part of the treatment process.
7. Material that enters the treatment process accumulates in sedimentation tanks and causes blockages.
8. Rodney Kerr, Service Planning Lead at Sydney Water, gave evidence of debris discharged with wastewater from emergency relief structures that operate as release values for the sewer network. The emergency relief structures are activated when intense periods of wet weather occur. Mr Kerr’s evidence shows that the debris included wipes and other rag-type material.
9. Mr Sheridan gave evidence that he has observed an increasing impact of wipes at the waste water treatment plants since 2014, in particular at the initial screening stage. He described the impact of solids, including rag-type debris and wipes on management of the treatment plants in high flow conditions (during or following rain events).
10. Mr Ross Brown gave evidence that, both in his former career as a contractor plumber and in his current role as a hydraulics engineer at Abel & Brown, he has observed cloth-like material clumping in drainlines:

During the period 1990 to ‘94, I saw – sewer blockages tend to – materials tend to clump together as a general rule. They do. They get trapped on things. I’ve seen solid matter and cloth-like materials get trapped. Subsequent to that, I’ve seen clumps of material containing toilet paper, solid faecal matter, other materials all clumped together as well.

1. Mr Brown also gave evidence that wipes are one of a number of contributing factors to the blockages he has inspected:

In my experience, as – the cause of sewer blockage is usually a combination of factors. It’s not one – it’s not paper, it’s not faecal matter, it’s not wipes, it’s a – it’s not a defect in the sewer. It’s a combination of factors that come together to create the – the circumstances.

1. Mr Brown also gave evidence that “most, if not all, drainlines will have some form of minor imperfection”. Mr Brown accepted that a minor imperfection is capable of snagging a cloth or wipe-like material, which in turn may lead to the build-up of product behind it and a blockage.

#### QUU

1. Mr Hester gave evidence about how wipes interfere with the proper operations of the sewerage system and create increased “maintenance frequencies”. He gave several reasons why wipes can cause blockages in a residential customer’s private drainage, and can reduce the efficiency of sewage treatment plants.
2. At Riverview pump station in Ipswich, maintenance has been required on 13 occasions since 2010 due to faults or blockages caused by “rags (including contribution from wet wipes)”.
3. During cross-examination, Mr Hester gave various examples of the information that has been available to him in his role at QUU in forming the view that “wipes”, including wipes described as “flushable”, cause problems for the QUU waste water system, including the experience of QUU on a day-to-day basis (that is, the “full-scale experiment” run every day), which involves findings that “wet wipes entangle themselves in lift stations and are a participant in blockages, and they don’t have to travel all the way to the treatment plant to pose that risk or, in fact, materialise that risk”. Mr Hester also referred to the experience of the service delivery crews at QUU, who are regularly called to unpick rag material from the network.
4. Mr Hester said that that wet wipes “of all different types” can be observed at pump stations that are “very close to the point of discharge” and that it “seems a practical certainty that wet wipes of both types [flushable and non-flushable] are included in the wet wipes that appear at pump stations”. However, he ultimately accepted that he had no Brisbane-based evidence that wipes described as “flushable” make their way to the treatment plant and to the pump stations.

#### YVW

1. Mr Wilson gave evidence that blockages “caused by materials not designed to be carried by” the YVW network were most likely to occur in the following five locations:
2. within a customer’s private sewer pipes;
3. in YVW’s reticulated sewerage network, comprised of smaller pipes between 100mm and 225mm in diameter;
4. the inlets to YVW’s sewer siphons;
5. pumps at sewage pumping stations and sewage flow control facilities that are detention/storage tanks designed to prevent overflows from the pipe network; and
6. at sewage treatment plants.

#### KCC facility, Wisconsin

1. There was evidence that, in March 2013, the KCC facility in Wisconsin, United States of America, experienced a blockage that required clearing shortly after placing Cottonelle moist wipes in the restrooms of a building, called “KC North”. One email stated: “[W]hen they opened the manhole, we could see all the moist wipes and they were not deteriorated or broken down at all.” Another reported that “the backup surfaced way inside the building, not good”.
2. Senior counsel for the ACCC, Mr White SC, conceded that the evidence did not identify the wipes involved in this episode as the KCFC wipes in this proceeding.

## KCFC wipes

1. During the relevant period, KCA promoted and supplied KCFC wipes in the following four varieties:
2. Sensitive;
3. Sensitive (Out & About);
4. Cotton Fresh; and
5. Kids.
6. According to their packaging, the Sensitive (Out & About) wipes were 200mm x 135mm in size. The Sensitive and Cotton Free wipes were somewhat smaller (166mm x 131mm) and the Kids wipes were smaller again (166mm x 125mm).

### Packaging

1. The ACCC’s case relied on the following language and marking on the packaging of all varieties of KCFC wipes throughout the relevant period:
2. the descriptor “flushable”;
3. the words: “For best results, flush one or two cloths at a time”;
4. the words: “Cloths break down in sewerage system or septic tank”; and
5. the following logo:



1. Next to the logo, the Sensitive Wipes and the Cotton Fresh Wipes had the following words:

Often, dry toilet paper alone doesn’t provide a good enough clean. That’s where KLEENEX Cottonelle Flushable Cleansing Cloths come in: Lightly moistened toilet tissue wipes, to be used with your regular toilet paper to feel extra clean and fresh, everyday.

1. Next to the logo, the Sensitive Wipes (Out & About) had the following almost identical words:

Often, dry toilet paper alone doesn’t provide a good enough clean. That’s where KLEENEX Cottonelle Flushable Cleansing Cloths come in: Lightly moistened toilet tissue wipes, to be used with your regular toilet paper to feel extra clean and fresh.

1. Next to the logo on the Kids Wipes were the following words:

Making the transition to self wiping is easier with KLEENEX Cottonelle Flushable Cleansing Cloths for Kids. The lightly moistened toilet wipes are gentle, soft and conveniently sized to help little hands clean their bottoms better. Used with regular toilet paper, your kids will be extra clean and fresh, everyday.

### Website

1. In addition, the ACCC contended that 14 statements, published on webpages that are attached to the website www.kleenex-cottonelle.com.au at various times during the relevant period, also contravened the ACL. The webpages are:
2. A page entitled “Kids Cleansing Cloths FAQs” (**Kids wipes page**). It contains 19 questions and answers. The passages relied upon by the ACCC were contained in the following passage on the page:

What are Kleenex Cottonelle Flushable Cleansing Cloths for kids?

Kleenex Cottonelle Flushable Cleansing Cloths for kids are pre-moistened wipes that deliver a cleaner clean than using dry toilet paper alone. They are made from a specially designed cloth­like material that will break up in both the sewerage and septic systems so they are flushable. They are available in a 42 sheet resealable refill.

Is it safe to flush Kleenex Cottonelle Flushable Cleaning Cloths for kids?

Yes. Kleenex Cottonelle Flushable Cleaning Cloths for kids are made from a specially designed material which will break up in the sewerage or septic system like toilet paper. However, do not flush an excessive amount of wipes at one time (no more than two wipes per flush). Kleenex Cottonelle Flushable Cleaning Cloths for kids meet the EDANA Guideline for flushability.

How many wipes can I flush at once.

Sewage systems and stream flow conditions are different from door to door. Some extreme cases show that just one sheet can plug a toilet, so our advice is don’t flush these wipes if the water stream in the toilet is weak, and also don’t flush many sheets at once (we recommend that no more than two wipes are used per flush).

1. A page with the bolded words “Flushable Cleansing cloths page”(**Flushable Cleansing cloths page**) published from 19 October 2015 to 15 December 2015. The page contains the following words:

Flushable Cleansing cloths

Kleenex Cottonelle Flushable Cleansing Cloths are designed to deliver a cleaner, shower fresh feeling. Able to be flushed in the toilet, they are easy to use and suitable for the whole family’s hygiene. The wipes are also dermatologically tested, pH balanced and alcohol free, and remember that no more than two wipes flushed at a time.

1. A page with the bolded words “Flushable Cleansing cloths Refill”(**Flushable Cleansing cloths Refill page**), published from at least 29 October 2015 to on or about 1 May 2016. The page contains the following words:

Flushable Cleansing cloths Refill

Handy to easily slip into handbags or glove boxes, without taking up too much room, 3 packs of 10 cloths are there for when you’re on the go. Offering a sensitive choice, these personal hygienic wipes are hypoallergenic and have no added fragrance. A maximum of two wipes at a time.

1. A page headed “The convenient Flushable Cleansing Cloths range” (**Convenient cloths page**)that, relevantly contains the same words as the Flushable Cleansing cloths page set out above**.**
2. A page headed “Meet the Kleenex Toilet Paper family” (**Meet the family page**). The ACCC relied on the heading to the page, the word “flushable” and also to the following words, which I could not locate on the page:

Kleenex Cottonelle Flushable Cleansing Cloths are flushable due to technology that allows them to lose strength and break up when moving through the system after flushing. However it is important to note that sewerage systems and stream flow conditions are different from door to door. That is why we recommend no more than 2 wipes to be flushed at any one time.

The page includes the following words:

Flushable Cleaning cloths

Great for when you’re away from home and the kids bottoms need cleaning, these handy cloths provide that “just showered” feel and are just the answer. Available in either hypo-allergenic or fragrance free, choose from a tub pack, refill packs, cloths or a 3 x 10 on-the-go pack. Flush a maximum of two wipes at a time.

1. A page headed “You wouldn’t clean your car without water” (**You wouldn’t clean your car without water page**), which contains the following words:

You wouldn’t clean your car without water

Come to think of it, there isn’t much you wouldn’t clean without water. We use water when we take a shower, when we mop the floor, when our clothes get dirty – it’s the key ingredient in cleaning pretty much everything.

That got us thinking: why do we only use dry toilet paper in the loo? Are we getting the thorough clean we expect and deserve? Can we improve it by adding water? We didn’t think twice. That’s why we developed Kleenex Cottonelle Flushable Cleansing Cloths.

Available in 3 x 10 and 42-Sheet Packs, our Cleansing Cloths offer a new level of clean when used in conjunction with dry toilet paper. They’re soft, gentle and refreshing. They’re also 100% biodegradable so you can flush them without worrying about the environment and they fit neatly into your handbag so you can stay fresh and clean on the go.

Why should you think twice about the way you clean?

* A better, more hygienic clean when used with toilet paper
* Completely flushable
* Environmentally friendly
* Convenient range of sizes
* Feel more confident throughout the day

1. A page entitled “Wipe your hands of wiping bottoms” (**Wipe your hands page**) which includes the following words:

Making the transition to self-wiping is easier with Kleenex Cottonelle Flushable Cleansing Cloths for Kids. The pre-moistened wipes help little hands clean their bottoms better. Gentle and soft, they’re comforting for bottoms accustomed to baby wipes, yet they’re safe to flush. The kids’ wipes come in an easy to use pop-up tub easy for little fingers to access and they only dispense one at a time, so you save on toilet paper. They’re great for potty-cleaning too – simply wipe and flush.

### Composition

1. During the relevant period, the KCFC wipes were made from a “Hydraspun” basesheet produced by a process of “hydroentangling”. This involved a mix of fibres being arranged together in a loose web which was blasted with fine jets of water, causing the fibres to entangle and bond together without the use of a chemical binder or bonding agent. The fibres comprised approximately 75% softwood and hardwood fibres, 23% lyocell (being a form of rayon made from regenerated cellulose) and 2% bicomponent (plastic) polyester fibres.
2. Following the manufacturing of the basesheet, it was then converted to make the finished KCFC wipe product by applying a liquid, folding or interleaving the basesheet, cutting the product to size, and packaging the finished product. Thus, the wipes were packaged for use in a moist state.
3. Unlike toilet paper, which becomes soggy when wet, the KCFC wipes were kept in store in a moistened state, remaining intact, with a two year shelf life in that state.
4. There was an issue between the parties about the length of the fibres in the KCFC wipes. Neither parties adduced evidence of any test by which the length or lengths was measured. KCA said that the fibres in hydroentangled wipes are “short”, based on the classification of “flushable wipes” in the UK Water study.
5. In cross-examination by KCA, Mr Drinkwater agreed that the length of hydrocarbon derived plastic fibres in baby wipes was up to 25 mm. In re-examination by KCA, Dr McAvoy was asked to explain his opinion that roping would not be produced by flushable wipes. Dr McAvoy said:

This really occurred – realisation early on assessing flushable wipes and, in particular, looking at pump compatibility and seeing some of the wipes that were roping. And so what I did with product development is I asked them – because I knew then that the fibre links of these wipes that were roping were like 25 millimetre. So I said can you provide me with individual fibres of cut five, 10, 15, 20, 25 millimetre in length. And I tested these in the pump. And if they were less than 15, if they were five and 10, I saw no roping. 15 started to rope. Get to 20, by 25 you get these fibres their length is such that they just starting wrapping around each other. So, based on this experiment, it was, you know, if you’re truly going to be compatible with pumps and a flushable product, you need to keep the fibre length 10 millimetres or less. So flushable wipes are short fibres. They’re not going to rope. These are other wipes that would be roping, baby wipes, for example.

1. The ACCC submitted that the Court should infer from Mr Drinkwater’s evidence that the length of the bicomponent fibres in the KCFC wipes was up to 25mm.
2. As to the length of the regenerated cellulose fibres in the KCFC wipes, KCA’s evidence was that, in the context of producing wipes, the main benefit of regenerated cellulose is that the fibres can be made longer than ordinary cellulose, which enables a stronger basesheet to be created when the longer fibres are bonded together.
3. ACCC contended that, given the significant proportion of the KCFC wipes that were comprised of artificially lengthened regenerated cellulose fibres and “long” bicomponent fibres, the hydroentangled fibre mixture of the KCFC wipes were predisposed to “roping” of the kind observed in sewerage blockages, either together or in combination with other items in the sewer.
4. Based on Dr McAvoy’s evidence, the disposition of KCFC wipes to “rope” is a matter that could probably have been the subject of empirical evidence. In the absence of such evidence, I do not accept that the evidence provides a sufficient basis for a finding about the propensity of the KCFC wipes to rope, particularly without a clear identification of the relevant kind or extent of “roping”.

### Compliance with INDA/EDANA Guidelines and other testing

1. Mr Lortscher conducted or supervised testing on the KCFC wipes against the INDA/EDANA Guidelines at various times before and throughout the relevant period. These tests were primarily conducted at KCC’s FOMC in Wisconsin.
2. On each occasion that the KCFC wipes were tested, they satisfied the requirements of the INDA/EDANA Guidelines for flushability:
3. KCC tested the basesheet used in the embossed Out & About KCFC Wipes (the 105530 55gsm quilt embossed Hydraspun basesheet) on the following occasions:
   1. August – October 2010 (tested at FOMC – passed GD2 tests); and
   2. June – August 2014 (tested at FOMC – passed GD3 tests).
4. KCC tested the basesheet used in the non-embossed Out & About KCFC Wipes (the 105700 60gsm Hydraspun WL105700 basesheet) between December 2014 and January 2015 (tested at FOMC - passed GD3 tests).
5. KCA submitted that the KCFC wipes satisfied the GD3 criteria by a significant margin. For example, whilst the “slosh box” pass criteria in GD3 requires at least 25% of a product’s mass to pass through a 12.5mm sieve, on a test conducted by SGS Integrated Paper Services, Inc in 2017, most of the KCFC Wipes had over 80% of their mass pass through.
6. The ACCC did not dispute this submission, but noted that it did not refer to the “low flow slosh box” test, considered below. This latter test was not included in the GD3 criteria.
7. Mr Lortscher also gave affidavit evidence of “field testing”, including in the form of a “wet well” study in which he compared the performance of three flushable wipe products, including a competitor product, by supplying wipes to the 17 restrooms serving 1,000 staff at the KCC Wisconsin facility. He also referred to an onsite lift station pump where, since 2009, KCC has evaluated the compatibility of its products with the pump. In cross-examination, Mr Lortscher gave evidence on onsite field testing, drop studies in sewers, collection studies at treatment plants and onsite septic systems.
8. The ACCC submitted that, in the absence of supporting documentation, this evidence should be given very little or no weight. In my view, the evidence supports a conclusion that Mr Lortscher did not confine his relevant testing of KCC products to the INDA/EDANA Guidelines but also conducted testing by which he evaluated the sewerage systems themselves.

### Evidence of problems caused by KCFC wipes

1. The ACCC tendered documents obtained from KCA concerning 28 separate complaints from consumers about sewerage blockages following use of KCFC wipes during the relevant period (**consumer complaints**). The complaints related variously to household drainlines, septic systems and other sewage systems. The complaints included documents that record the following opinions:
2. An opinion of a plumber that a sewer choke in Mount Rankin, NSW in August 2014, was caused by “dip in pipework and flushable wipes”.
3. An opinion of a person, who may have been a plumber, that a septic tank in Mildura, Victoria had a blockage that “consisted of a large mass of what appeared to be wipes” in November 2014, accompanied by a complaint that blamed the blockage on KCFC wipes.
4. An internal email concerning a blockage in New Zealand in October 2015, which states “plumber confirms blockage caused by wipes”, apparently referring to KCFC wipes.
5. An invoice from a plumber dated 26 October 2015, which records: “Locate and remove paper napkin blockage in sewerage drain at rear of property” in Moorabbin, Victoria accompanied by an internal KCC email that states: “It may be correct to say that flushable wipes were a part of the blockage that has caused the home owner to call in a plumber, based on the photographs provided”.
6. An invoice dated 17 August 2015 from a plumber that records: “Clear blockage in toilet [indecipherable] line with eel caused by baby wipes.” The invoice is accompanied by an email from a consumer which states: “Please note, the plumber has written ‘baby wipes’ in the report, but meant ‘flushable wipes’.”
7. The ACCC did not attempt to prove the underlying facts in relation to these complaints by direct evidence from the relevant consumers or the plumbers who addressed the blockages. However, the complaints are evidence from which a conclusion may be drawn that KCFC wipes caused or contributed to harm to the authors of the complaints.
8. KCA’s records also included a complaint about a blockage allegedly caused by KCFC wipes in Auckland, New Zealand in September 2014. In response to the complaint, Neil Richards, who was part of the Adult and Feminine Hygiene Division at KCA, made the following observations:

In our experience, from a relatively small number of blocked plumbing complaints here in Australia, if the person lives in a country area with a long pipe run or if the pipeline doesn’t have a good angle of fall to a septic tank then these are both factors that make the use of a high number of flushable wipes possible contributing factors in a blockage.

Two other factors include the presence of nearby large trees with roots that can cause small snags in the internal surface of the pipework or a large number of turns in the pipework.

The EDANA test that relates to the dispersability of our wipes (that we meet), uses an oscillating tray to ensure ongoing movement of the wipes to speed up the break-up of the basesheet.

Basically our flushable wipes do work best in a smooth high flow pipe system.

### Did KCFC wipes contribute to blockages in the sewerage system and increased maintenance costs?

1. The ACCC argued that KCA should not be able to take advantage of the fact that it is “incredibly difficult” to isolate the impact of their particular brand of wipes on the wastewater network. Even so, a positive finding on this question requires an adequate evidentiary basis.
2. Having regard to the substantial sales of KCFC wipes in the relevant period and the likelihood that those KCFC wipes were flushed in accordance with the “flushable” claim, it is reasonable to infer on the balance of probabilities that the KCFC wipes contributed to blockages in the sewerage system in an unknown number of instances, and to maintenance costs. However, even faecal matter and toilet paper contribute to sewerage blockages. Thus, as noted above, in the UK Water Study, organic material and the bulk of toilet paper captured with the blockage samples was washed out of the sample.
3. The ACCC contended that there is a “wealth of evidence” to support an inference that KCFC wipes contributed to or caused harm to household plumbing and the sewer network. It relied on the following matters:
4. The consumer complaints.
5. The blockage at the KCC Wisconsin facility.
6. Various matters that demonstrate what KCA accepted, namely, that the KCFC wipes took longer to lose their wet strength than toilet paper, and therefore presented a greater risk of snagging and clumping with other materials, when flushed. These matters included:
   1. The fact that a product may pass GD3 and not break down during conveyance through the sewerage system.
   2. The KCFC wipes contain plastic and regenerated cellulose that ensures wet strength is maintained thereby delaying dispersion.
   3. Testing of the Hydraspun basesheet disclosed that it did not lose any strength after 60 minutes in a drainline thereby increasing the potential for contributing to blockages in drainlines and sewer pipes.
   4. Longer fibres are associated with the roping effect and the KCFC wipes did not merely contain short fibres.
   5. The GD3 “slosh box” test permitted 75% of the KCFC wipe to remain intact.
   6. An internal KCA email dated 29 October 2015 which states relevantly:

1) Area of contention with stakeholders is around flushability” V’s dispersability. Flushability means it’s availability to disappear down the toilet. Dispersability is the ability of the product to breakdown in the sewer. The water authorities issue is with ‘dispersability’ as our products don’t fully break down and disperse in the water (we know that our products imported into Australia are only about 65% dispersible – whilst we obviously do not discuss that externally! – which is hence why we’re fast tracking a significant product upgrade.

* 1. KCFC wipes did not pass the “low flow slosh box” test. This contention is not accurate since the “low flow slosh box” test did not have criteria for determining whether a product passes or fails. However, the test can be used to compare the relative performance of different products. A KCC internal email dated February 2015 expressed the view that the GD3 “slosh box” test was likely to evolve to a lower flow slosh test that many would say was more representative of normal usage in waste water pipes.

1. KCA’s October 2015 amendment to the packaging for the “Out and About” wipes from “[c]loths breakdown in sewerage system or septic tank” to the words “[c]loths suitable for use in properly maintained sewerage systems and commercial septic tanks”. The ACCC described the new language as an implied warning that the product was not suitable for domestic septic tanks.
2. KCA’s change to a better dispersing product in May 2016, which was an attempt to reduce consumer complaints and to respond to concerns raised by the media that the KCFC wipes were not suitable to be flushed.
3. The INDA/EDANA GD3 Guidelines were not an appropriate basis to determine whether a product was suitable to be flushed. It follows that large volumes of KCFC wipes were being placed into the drainlines and sewer systems that were not suitable, thereby contributing to blockages.
4. The risk of an occurrence is a different thing from the cause of an occurrence: *Amaca Pty Ltd (under NSW administered winding up) v Booth* [2011] HCA 53; (2011) 246 CLR 36 at [41]. In the context of the common law of negligence, in *Roads and Traffic Authority v Royal* [2008] HCA 19; (2008) 245 ALR 653,Kiefel J (as her Honour then was) said (at [144]):

The present state of authority does not accept the possibility of risk of injury as sufficient to prove causation. It requires that the risk eventuate. Kitto J in *Jones v Dunkel* [[1959] HCA 8; (1959) 101 CLR 298] said that one “does not pass from the realm of conjecture into the realm of inference” unless the facts enable a positive finding as to the existence of a specific state of affairs. Spigelman CJ pointed out in *Seltsam Pty Ltd v McGuiness* [[2000] NSWCA 29; (2000) 49 NSWLR 262], with respect to an increased risk of injury, that the question is whether it did cause or materially contribute to the injury actually suffered.

1. As the evidence above reveals, in sewerage systems, a blockage may happen in many different ways for many different reasons.
2. A large volume and range of non-flushable products are deposited in the sewerage system and have been found to cause or contribute harm to the sewerage system, or increased maintenance costs. These include disposable nappies, feminine hygiene products, paper towels and an array of clearly non-flushable products which, in the evidence, included a curtain and dishtowels.
3. The Australian water authorities themselves are most concerned with “wet wipes”, which includes a large volume and range of wipes apart from wipes that are marketed as “flushable”. They include baby wipes, household cleaning wipes and facial cleansing wipes. There is substantial and florid evidence that non-flushable wipes such as baby wipes and industrial cleaning wipes have negative impacts upon the system. Collection studies have identified wipe products that have caused harm or are likely to cause harm, without identifying KCFC wipes.
4. Against this evidence of behaviour that presents a substantial risk of harm to the sewerage system from products other than the KCFC wipes, the ACCC did not point to a single sewerage blockage (that is, beyond the household drainline) for which there was evidence that it would not have occurred if KCFC wipes (or even wipes marketed as flushable) had not been flushed into the system.
5. In those circumstances, the evidence that KCFC wipes posed a greater risk of snagging and clumping with other materials in the sewerage system than toilet paper does not justify an inference that the risk eventuated in the form of blockages to the sewerage system or increased costs in maintaining that system, except in the instances documented in KCA’s consumer complaint records. However, those records are only weak evidence of the impact of KCFC wipes on household drainlines because they contain only the information that the relevant consumer chose to supply to KCA and there was no opportunity to test the veracity of that information during this proceeding. Those records do not support an inference of a wider problem.
6. Further, it is significant that no evidence was adduced from a single consumer or plumber of a blockage resulting from the use of KCFC wipes. As earlier noted, Mr Drinkwater’s evidence was that 90 percent of blockages occur in pipes around the house and leading from the house with the first, say, hundred metres. Given the substantial volume of evidence adduced from water authorities, the availability of the KCA records that identified the consumers who made complaints and the hundreds of millions of KCFC wipes concerned, this omission casts doubt on the probability that KCFC wipes caused or contributed to the alleged harm.
7. As to the other matters relied upon by the ACCC:
8. Mr Lortscher’s evidence was that the wipes involved in the KCC Wisconsin blockage were not the same composition as the KCFC wipes and, accordingly, this blockage does not support the ACCC’s proposed inference.
9. I accept that KCA’s October 2015 packaging change indicates its view that it should not recommend to consumers that the KCFC wipes be flushed into a domestic septic tank but this is not sufficient to support the inference contended for by the ACCC.
10. KCA’s change to a better dispersing product in May 2016 indicates that the KCFC wipes were inferior to the new product but not that the KCFC wipes were unsuitable to be flushed.
11. As explained below, in the absence of evidence that the KCFC wipes actually caused or contribute to relevant harm, I am not satisfied that GD3 was an inappropriate basis for KCA’s claim of flushability.

### Other evidence relied on by the ACCC to establish harm

1. The ACCC contended that the following matters also go towards establishing on the balance of probabilities that the KCFC wipes made up a proportion of blockages in domestic and municipal sewerage systems in Australia during the relevant period, and contributed to increased maintenance costs:
2. the millions of packets of KCFC wipes sold in the relevant period;
3. the slow breakup of the product in “low flow slosh box” testing; and
4. the presence of obstructions such as tree roots, belly dips and misaligned pipes, both on customers’ properties and in the sewerage system itself.
5. These are matters that increase the chance that KCFC wipes in fact caused or contributed to relevant harm but, having regard to the multiplicity of other potential causes, they do not support a conclusion that KCFC wipes caused harm in any particular instance. Alternatively, they do not support a conclusion that KCFC wipes caused any greater harm than toilet paper.

### KCA’s knowledge concerning the performance of the KCFC wipes

1. The ACCC noted that KCA did not undertake any testing of the KCFC wipes in the Australian environment before making the “flushability” representation, or at any time during the relevant period.
2. At the commencement of the relevant period, KCA officers were aware that the KCFC wipes met the INDA/EDANA GD3 Guidelines for flushability. In May 2013, in the context of potential criticism by a consumer watch dog television show in New Zealand, a KCA internal email recorded:

Our direct experience since these wipes have been on sale here has been good with few complaints. Those that have come about where kids have filled toilets etc or where there is a tree root issue. They do not break down as quickly as tissue does causing problems sometimes in these situations. They do pass the US standard for flushability I believe (Daniel?).

1. In response to this email, Daniel Foster, the product developer from the Product Technology and Development team who was assigned to the Family Care team in Australia, stated:

I can confirm our flushable cleansing cloths (along with our dry products) confirm with the INDA (US) / EDANA (European) guidelines for flushability. I am not aware that Australia or NZ has any flushability guidelines. You will always be able to find complaints on the internet etc. about wipes as it is true that they do not break down as readily as dry product (hence the on pack instruction to only use 2 per flush). If a consumer has an older toilet with potentially already partially blocked or caked plumbing then blockages will be more likely. However they do have to pass these tests (detailed below) in order to claim flushability.

… [O]ver at KCPX, Pete Lortscher runs the flushability tests according to the standard INDA/EDANA flushability guidelines (there is a 200+ page document that outlines the guidelines). KCPX has toilets set up with the clear drain lines as well as simulators for various pumps, tanks, etc …

1. In August 2013, a technical magazine for the plumbing sector sought comment from KCA on the issue of wipes disposal and its impact on plumbing/draining systems. Mr Foster sought information about the KCFC wipes from Colin Ackroyd, KCC’s Technical Leader – Nonwovens, Basesheets, Formulation and Fibre: Consumer Products Europe, who provided material about GD3 and added comments, including the following:

There are gaps between where water authorities and stakeholders would like us to be and where we are, particularly as it relates to the rate of break-down of our products.

In Europe and the EU we are in a constant debate with the authorities, stakeholders and NGOs to help them understand we are part of the solution not the problem. The other non-flushable wipes and other non-flushable items which find their way into the sewer are the root cause of the problem.

We need to be allowed to continue to label our products as flushable because:-

1.0 we believe they are.

2.0 we need to be able to market flushable in order to justify continued investment into developments to come up with more flushable/dispersible products

3.0 If we take the flushable claim off pack we can than sell any old cheap wipe but consumers will still flush them, regardless of what we say to them.

The US are under threats of legal action and changes to state laws to make it illegal to flush wipes.

The testing in the guidelines is designed to differentiate a wipe which has the ability to break-down to some extent from a wipe such as Baby Wipes or Facial Wipes which will definitely not breakdown and could cause a pipe or pump blockage. (There may be one or two small baby wipes suppliers who claim flushable but not the vast majority)

Having a product which passes these guidelines does not mean that we have products which break-up like toilet tissue and therefore in the wrong sewer environment our wipes may contribute to a blockage in a pipe, for example if it has fats oils and grease build up or it is a broken sewer. I get the impression that some of our colleagues assume that because our wipes pass the guidelines that we should never receive a complaint for alleged blockages, this is definitely not the case and we should help people understand this.

We have carried out clog analysis in pumps and pipes in Europe and the US. We have not found any wipes who claim to have passed the guidelines in a pump clog. We have found lots of Baby Wipes and in the US paper towels in pump and drain clogs.

The work has focused upon EU and US sewage systems. To my knowledge we have not used Australian sewer system specs and equipment, but in reality we should not get too bogged down in that point. While the tests are presented in a detailed manner they are [the] manufacturers best estimate of a series of tests which will give us some minimum indication that a wipe is flushable.

The test method acceptance criteria needed to be agreed and accepted by a consensus of all INDA and EDANA wipes manufacturers, which resulted in the poorest performing wipe being used as the acceptance criteria.

KC’s wipes supplied by the EU and the US perform well above the minimum acceptance criteria required by the test methods.

You will be asked how long does it take for the wipes to breakdown. The answer is that it depends upon the sewer environment to which the wipes are exposed. It can vary from a few hours to a few weeks depending. If it’s a fast flowing system with pumps it may only take a few hours or minutes. If it’s a slow moving system it may take weeks if it is caught at the screen and removed for land fill where the breakdown will be through biodegradation.

1. Subsequently, Mr Foster proposed that the following information be provided to the magazine:

INDA and EDANA recently launched the 3rd Edition of the Flushability Guidelines. This document and related communications are available through the INDA and EDANA websites.

http://www.edana.org/inudstry-initiatives/flushability

I have attached an executive summary which explains some of the history and background to the 3rd Ed of the flushability guidelines and also the guidelines themselves.

The testing in the guidelines is designed to differentiate a wipe which has the ability to break-down to some extent from a wipe such as Baby Wipes or Facial Wipes which will definitely not breakdown and could cause a pipe or pump blockage. (There may be one or two small baby wipes suppliers who claim flushable but not the vast majority).

Having a product which passes these guidelines does not mean that they will break-up like toilet tissue and therefore in the wrong sewer environment our wipes may contribute to a blockage in a pipe, for example if it has fats oils and grease build up or it is a broken sewer.

We have carried out clog analysis in pumps and pipes in Europe and the US. We have not found any wipes who claim to have passed the guidelines in a pump clog. We have found lots of Baby Wipes and in the US paper towels in pump and drain clogs.

The test method acceptance criteria needed to be agreed and accepted by a consensus of all INDA and EDANA wipes manufacturers, which resulted in the poorest performing wipe being used as the acceptance criteria.

Kimberly Clark’s wipes supplied by the EU and the US perform well above the minimum acceptance criteria required by the test methods.

1. There was no evidence to support Mr Foster’s statement that the “poorest performing wipe” was used as the acceptance criteria for the INDA/EDANA GD3 Guidelines. The development of these guidelines is addressed below.
2. KCA’s internal documents reveal an ongoing concern about the performance of the KCFC wipes. In particular:
3. In about September 2013, KCC sought to develop a list of claims that “Australia can make, with substantiation” for KCFC wipes including as to “Ability for product to breakdown”. A briefing document referred to “Safe to flush” and “flushability” as aspects of that “Area to investigate”.
4. In May 2014, an email entitled “Flushable Wipes & Refills CHALLENGES” stated, apparently in relation to a proposed new product or products:

Flushing directions on the outside of the tub/inside pack of the tub and the refills – we need to replace this without Aust statement. “Only Flush a maximum of 2 wipes at a time[”] vs. US claim of “For Best results flush 1 or 2 wipes at a time”. Due to differences in our septic and sewerage system the US statement is likely to result in claims for plumbing and piping costs which could be detrimental to our business and our brand.

The following day the following “Artwork issue” was identified:

The back of pack states “For best result, flush only one or two cloths at a time”. This is problematic – our clear direction on current wipe packs is that consumers should not flush more than 2 wipes at a time. This is important given the rate of (expensive) sewerage claims we are seeing.

1. A KCA slide pack entitled “Flushable Cleansing Cloths Technology Overview 101 recorded in relation to the Hydraspun basesheet:

Meets Ed 3 Guidelines

Does not disperse readily

0% Strength loss after 1 hr

The slide pack referred to GD3 as “Still Accommodating”.

1. The comments set out at [143] above.
2. A December 2014 internal KCA email which states “we would love to have a wipe that breaks up more quickly”.
3. A December 2014 internal KCA email which states:

3. In speaking to Jo in the UK she mentioned how they have been able to interact with Thames Water and have a positive fact based discussion that has highlighted the order of problems facing Thames Water. The first issue is that sewer blockages are caused by “everything” (specifically items like cooking oil, paper towels and all types of personal items) that humans flush down the toilet. So after cooking oil (in the case of the UK) lower down the list is “wipes” in general as the number #2 problem which includes every type of wipe that is broadly not flushable and then as number #3 concern it is actually “flushable wipes”. So “flushable wipes” per se are accepted as a lower level concern than many other items.

4. I have several other references to share with you about US municipal sewer protection programmes that highlight to consumers the message that they should only send the 3 “**P**’s” down the toilet, so “**P**ee”, “**P**oo” and “toilet **P**aper”. So it’s not something we want to lead with in discussions with Sydney Water but I’ll share them with you as some background on the issue. A key point in the reports includes analyses of the composition of sewer blockages, and actual flushable wipes generally only account for 3-5% of large blockages.

5. Lastly, I have attached the label artwork in the presentation for each of current wipes packs, to demonstrate the “flushable” or “do not flush” logos.

1. A December 2014 internal email that contains the following:

DO WE KNOW THE IMPACT OF OUR PRODUCT ON WATERWAYS?

I do not have any specific information on this. Neil do you? If not we can request it. My guess is that the expectation is that our wipes are removed during sewerage treatment processing with the solid material being separated out and sent to landfill.

1. A February 2015 internal KCA email in relation to Project TRUMPTON, which was a project to improve the “dispersibility” of the current basesheet for “Moist”, which contains the following:

What kind of basesheet are we talking about? Hydraspun? Yes our current base sheet from Suominen – 65gsm Hydroentangled (HET) Wet laid fabric

We understood that you got improvement in the dispersibility, not too much in the flushability, is it right? –

* **Flushability** as a word is greatly misunderstood, as everyone has a different understanding of it from, how many times I flush the toilet (to get rid of the waste), to how it clears my pipes, it doesn’t cause blockages, right through to it biodegrades (like Germany), or all of these.
* **Edana** has a set of 7 tests / part of their flushability guidelines that if you pass them you can claim flushable, or if you don’t they recommend that you use a put an [sic] unflushable logo on the pack. Each of the tests represent the wipe on its disposal journey (see attachments). These are voluntary guidelines, but KC as a member of [E]dana (International association serving the nonwovens and related industries/industry Expert) we abide by them and most manufacturers do. These are the test that differentiate us from baby wipes, household wipes which are not flushable.
* In terms of **dispersibility** the test that covers this is called the slosh test and it is part of the Guideline testing **ref FG502**. This current Slosh test is a moderately high speed/flow test (29RPM). Where this new improved basesheet has shown great promise is in a power flow Slosh test (15 RPM – which is where this test is likely to evolve to in future [E]dana guidelines). Many would say this is more representative of “normal” usage in our waste water pipes. That said the guidelines as a PASS or FAIL and both the current and this new basesheet pass the current Edition 3 guidelines.
* Also as we are removing the synthetic element we would predict that the improved basesheet should be better in terms of biodegradability **FG506**

1. A May 2015 document entitled “Flushability Issue Taskforce Meeting Recap” that states:

Media and wastewater treatment officials are focusing heavily on a very small part of the overall problem. Limited testing has proven that flushable wipes really only account for about 10% of sewer accumulations. Other items that should NOT be flushed are the real reason for negative impacts on wastewater systems/facilities. – those items account for 90% of the problem.

1. A June 2015 internal KCA email entitled “Wipes break up”, which states:

Just for your Reference:-

The technical fine print that our factual statement doesn’t address is that within the Waste Water community there is some contrasting opinions that the slosh box testing is a true and correct representation for the physical process of wipes being washed down a sewer system.

So what’s happening in this area is that the EDANA Standard for Flushability is under review (to Revision 4 status) and at the same time there is a process underway for an ISO Standard to be used for “Flushable Wipes”. Once an ISO Standard is issued (around 2 years away) everyone will start to adopt this as the minimum standard that must be met to claim “Flushability”.

Both new standards will be the experts collective view to being closer to real sewer pipe conditions, but just in my opinion both of them will still be an approximation of the drainage process since it will be practically impossible to make any test that matches the huge range of sewer pipe conditions (Things like:- flow rate, angle of fall in pipes, internal diameter of pipes, corners, snags in pipes and even whether the pipe is plastic or the old clay pipe are all variable things that will still be there in the real world).

1. A July 2015 internal KCA email which states:

We had one request for comment from Radio NZ and we shared the attached statement and the resulting coverage was neutral. Note the [sic] in the global Q&A on wipes it highlights that flushable wipes should start to breakdown in about 30 min, however we’ve steered away from stating this in any of our responses back to media. Reason being is that I’ve been in a stakeholder meeting with the water industry (thankfully no media!) where they’ve had a slosh test set-up with our flushable wipes, along with baby wipes and toilet paper and after four hours the toilet paper was dispersing but our flushable wipes didn’t start dispersing at all and looked similar to the baby wipes (which we obviously didn’t expect to disperse). Therefore, I’ve been hesitant to include any message about how long it should take to disperse in fear of setting ourselves up for being ‘tested’ by the media.

1. An email chain concerning the proposed change of basesheet from Hydraspun to “Queen”. One of the emails notes that Queen is significantly more dispersible that “NBond” (a third basesheet), with the comment: “key to this is strength loss in drain line”. Attached to the final email, sent on 1 December 2015, is a document entitled “Competitive Flushability Performance” comparing “Suominen Hydraspun”, Queen and NBond. This document states that the Hydraspun product failed on the GD3 “Dispersability slosh box” (with a result of 30%-75%, against a standard of ˃95% through 12mm sieve after 3 hrs), “% Drainline strength Loss after 60 minutes” and “Municipal pump % increase” tests. In particular it records a score of 0% for the “% Drainline strength Loss after 60 minutes” test.
2. An email dated 2 December 2015 says the following, in discussing the relative merits of Queen and Hydraspun basesheets:

All other Hydraspun wipes, such as we’ve been sourcing from 3rd parties in Europe and also the option we had with NBond from China do not significantly lose strength after flushing as the strength comes from the hydroentangling of the fibres which is not easily reversible. So to have a highly dispersible Hydraspun wipe essentially means having a low strength to start with, creating problems in use.

1. An email chain ending in December 2015 including a chart of results for various products on “slosh box dispersability” (standard flow and “low flow”) and strength, labelled: “Queen is by far the strongest wipe, yet also has the best dispersability (slosh box %, standard & low flow)”. The chart shows that “Cottonelle Kleenex cotton fresh” and Cottonelle Kleenex sensitive scored around 70% and 60% respectively on the standard “slosh box” test which Mr Lortscher agreed was the GD3 “slosh box” test. The chart showed scores around 10% for both products on the “low flow” test in respect of which, according to Mr Lortscher, “[e]ven the wastewater community decided this level of agitation was way too low”.
2. This evidence demonstrates that some KCA employees believed that KCFC wipes had caused problems “sometimes” and had the potential to cause sewerage blockages. Some KCA employees also believed that the KCFC wipes had passed the GD3 standard for flushability; that it would be preferable to change to a more dispersible basesheet to improve flushability; that there was different data about the contribution of flushable wipes to sewerage blockages including that they had not been detected in a pump clog; that they comprised 3-5% of large blockages and accounted for about 10% of sewer accumulations; that there was a process underway for an International Organization for Standardization (**ISO**) standard for flushable wipes; and that the Queen basesheet was significantly more dispersible than the Hydraspun basesheets.
3. In my view, KCA’s records show an awareness on the part of some KCA employees that the KCFC wipes had probably caused harm in particular instances and that there was a risk that the KCFC wipes could cause or contribute to sewerage blockages, but not a belief or knowledge that the risk was so substantial that the wipes should not be labelled “flushable”.

### KCA’s basis for making the “flushability” representation to Australian consumers

1. The ACCC drew attention to the following evidence of Dominique Chandler, KCA’s Marketing Sector Lead for the Family Care division, who had overall responsibility for managing KCA’s portfolio of Family Care products, including the KCFC Wipes from October 2013 until May 2018:
2. KCA had been selling wipes marketed as “flushable” in Australia since 2005. KCA undertook no testing of the products in Australia to substantiate the various flushable claims. All testing was done overseas: “They had tested the INDA and EDANA standards and [KCC] believed that was appropriate globally”.
3. KCA made no inquiries of Australian waste water utilities in circumstances where they were selling a product that was intended to enter the wastewater network. Ms Chandler only became aware of the existence of WSAA in 2015, well after the launch of the KCFC wipes.
4. In relation to the packaging statement “[f]or best results, flush one or two cloths at a time”, Ms Chandler’s evidence was as follows: “That would have probably came [sic] from, my understanding, the US advised – the US or Europe would have provided that based on obviously the testing that had been done and the best results that were required with choosing of two”.
5. “I knew that if they were tested by the technical team in the US, they would have been tested as per the guidelines”.
6. “If the technical team, who are the experts in the KC Global world, advised my team that they were up and withholding the guidelines, then I had faith that they did”.
7. “[I]t passed the testing ... around INDA and EDANA, and I have to believe the technical experts are giving me the correct information”.
8. Ms Chandler gave evidence that there was not a standard in Australia but that her understanding was that KCA was “able to use the US and the Europe – the INDA and EDANA standards”.
9. Ms Chandler did not know if the US had done any investigation as to whether it was appropriate, given Australian conditions, to rely on the INDA/EDANA Guidelines, and she confirmed that she had not done anything in that regard either.
10. The ACCC was critical of Ms Chandler’s understanding of the concept of “flushability” but, in my view, it was unremarkable. In particular, her belief was that “[a]s long as it went through the system – the toilet system, through the sewers and out into the wastewater, that was – and didn’t clog, that was what my understanding is of what we could use to say ‘flushable’”.

# “Flushability” standards

1. During the relevant period, there was no legislatively mandated standard for identifying products as “flushable”.
2. The parties did not agree on a technical standard for assessing flushability.
3. The ACCC argued that, to justify a claim of flushability, a product should disperse and sufficiently dissolve or disintegrate in water so as not to present problems under conditions typically found in household and municipal sanitation systems. Otherwise, the ACCC did not identify an objective standard by which flushability may be assessed, apart from toilet paper.
4. Professor Paschke agreed that, if a product had a tendency to interfere with the proper operations of a pump within the sewerage network, that product is not compatible with the network. By logical extension, if a product had a tendency to interfere with the proper operations of any element of the network, that product is not compatible with the network.

## The “Three Ps”

1. Toilet paper is the benchmark for many water authorities in deciding what is “flushable” in the sense of what those authorities accept may appropriately be disposed of down the toilet. The evidence of Dr Cabardo of Sydney Water was that this is because toilet paper, when used properly, has not been the cause of “repeated and regular blockages or damage to the waste water system”.
2. For example, YVW publishes the following instruction and information on its website:

Do NOT put the following in the sewerage system:

* Plastics
* Motor oils, paints or pesticides
* Non-biodegradable products
* Fats, oils or food scraps
* Cotton buds, nappies, condoms, sanitary products and wrappers
* Medicines
* Wet wipes

What NOT to flush

Every fortnight over four tonnes, about the size of an African elephant, of wet wipes are removed from Yarra Valley Water’s sewerage network because they have been wrongly flushed into the system. Wet wipes are a mammoth issue, with over 100 tonnes needing to be removed each year with some causing blockages that can cost up to $1,000 a time to clear. While some of these products claim to be flushable, they may not be and customer should be mindful of what is flushed down the toilet. The best option is to put the wet wipes into the bid.

1. Kieran Smith, Manager of Media and External Communications at Sydney Water, gave evidence about Sydney Water’s educational activities directed to informing households that people should only ever flush human waste and toilet paper down the toilet.
2. Mr Hester of QUU gave the following evidence:

48. In relation to the wastewater that enters the sewerage system via toilets, in general only three thing are suitable for flushing down toilets by residential customers, being the “Three Ps”: pee, poo and toilet paper (Three Ps). If other types of waste (such as wipes) are introduced into the system, efficiency of the network and its integrity can be significantly compromised. This results in increased cost and undesirable consequences such as blockages, damage to equipment and in some cases, environmental harm. It is for this reason that QUU promotes the message that only the Three Ps are suitable for flushing down toilets.

49. To be suitable for flushing down the toilet, a product needs to break down quickly – essentially during the agitation caused by the flushing of the toilet. Toilet paper is suitable for flushing down the toilet because it breaks down quickly in the U-tube or S-bend of the toilet, from contact with water and from the energy created by the flushing action. Wipes, whether described as flushable or not, are not suitable for flushing down the toilet because they do not break down, but instead remain intact well after being flushed down the toilet, resulting in the problems referred to in paragraphs 67 to 84 below.

50. Based on my experience at QUU, over the last approximately seven years, QUU has experienced more blockages and maintenance problems than previously as a result of items being flushed which should not be flushed, namely sewage overflow, pump stations faults, and increased requirement for intervention at sewage treatment plant inlet screens. “Rags” (which term includes wipes) are identified as a contributing factor for all of these faults.

1. In October 2015, after a review of messaging by Australian water utilities around the issue of what can be flushed, the WSAA identified some key messages concerning “wet wipes”, including:

At present there are no agreed standards in Australia or internationally around “flushability” so we advise customers to only flush the three P’s (poo, pee and paper) down their toilet. Other products are not acceptable because of their high potential to cause blockages, end up on our beaches and rivers, create sewage overflows, and increase costs for sewage treatment and maintenance.

1. Dr Ryan gave the following evidence concerning this message:

It was a precautionary – using the precautionary principle, essentially we’re finding wipes associated with blockages and pumps and so in the absence of data, we know that toilet paper has not been causing a problem within the waste water system for many years and so the fall-back position, or the fall position, was the three Ps; nothing but pee, poo and paper down the toilet as a precaution to protect the system.

1. In September 2016 (that is, after the relevant period), a large number of organisations worldwide, including Australian water utilities, endorsed a document entitled “International water industry position statement on non-flushable and ‘flushable’ labelled products”, which states:

To prevent problems with sewers, pipe and toilet blockages plus the human and environmental cost of sewer flooding and pollution, the organisations signing this statement below agree that:

* Only the 3Ps – Pee, Poo and toilet Paper – should be flushed.
* Currently, all wipes and personal hygiene products should be clearly marked as **“Do not Flush”** and be disposed of in the bin or trashcan.
* Wipes labelled “Flushable” based on passing a manufacturers’ trade association guidance document should be labelled **“Do not Flush”** until there is a standard agreed by the water and wastewater industry.
* Manufacturers of wipes and personal hygiene products should give consumers clear and unambiguous information about appropriate disposal methods.
* Looking to the future, new innovations in materials might make it possible for certain products to be flushed, if they pass a technical standard which has been developed and agreed by the water and wastewater industry\*. Preferably this standard would be developed under the banner of the International Standards Organisation (ISO).
* Key requirements for any standard include that the product:

a) breaks into small pieces quickly;

b) must not be buoyant;

c) does not contain plastic or regenerated cellulose and only contains materials which will readily degrade in a range of natural environments.

1. KCA submitted that the position statement effectively adopts the “Three P’s” message merely as a precautionary measure. In my view, the position statement puts the position more strongly than that: it contemplates the possibility of an agreed “flushability” standard, but seemingly only in the event of innovative products that are superior to the existing products.
2. Mr Drinkwater expressed the view that “we should be sticking to the three Ps” is “somewhat outdated”, saying:

We can’t turn back time. Wipes are here to stay. They are a convenience product that lots of people use. And my view is we have to deal with it in a sensible way, in a way that allows wipes to be used, where they don’t cause a problem to the drainage system.

1. The ACCC did not put a case that the suitability of the KCFC wipes for flushing as a matter of fact is to be determined by reference to the opinions of the wastewater authorities, without more.

## Recent work to develop a standard

### ISO TC 224 WG10

1. Since around 2014, a working group of the ISO Technical Committee 224 (**Working Group 10**) has sought to develop an ISO Technical Specification for assessing flushability. Dr Ryan is chair of the Australian mirror committee of Working Group 10. Mr Drinkwater is a member of the UK’s mirror committee of Working Group 10.
2. Dr Ryan’s evidence was that Working Group 10 is no longer working to develop a Technical Specification but, instead, to produce a Technical Reference describing the key characteristics of the sewage network that need to be considered in determining whether material flushed down the toilet is compatible with the sewerage network. It is intended that this document could form a reference document for organisations seeking to develop a standard or guideline on material that could be deemed compatible with the sewerage network and hence labelled “flushable” or suitable for toilet disposal.
3. Preliminary agreement has been reached as to the following principles:

27.1 Any product should not adversely affect toilet performance;

27.2 Any product or solid material discharged via a toilet should not adversely affect the intended performance of the drain line or sewer system. Particularly it should not snag or settle. The issues which may occur from the discharge of inappropriate solid materials in a wastewater transport system include:

27.2.1 snagging/fouling of pumps;

27.2.2 settlement/snagging in pipes; and

27.2.3 blinding of grills and screens by whole or only partially disintegrated product.

27.3 Sewers are designed to maintain a velocity necessary to transport solids, to prevent deposition and decomposition in the sewer. Commonly cited references propose that a minimum velocity in a sewer of 1ft/sec (0.3m/sec) will stop solids settling. A velocity of 2 ft/sec (0.6 m/sec) is required to allow re-suspension of solids.

27.4 For small diameter pipes, given typical diurnal flow variation, the Reynolds Number can range between, 4,000 and 36,000. For global considerations for low volumes of flow in small-diameter sewer pipes, an indicative value for the Reynolds Number of 20,000 may be used.

27.5 Wastewater treatment plants often have an obligation to minimise the impact on the environment. This can be explicit in legislation or expressed in a licence condition.

27.6 Treatment plant processes are designed to remove settleable materials and biologically degrade material that remains in the liquid stream, some are also able to remove nutrients such as nitrogen and phosphorus. Material that enters a sewage treatment plant should not unduly affect the performance of that plant to meet the legislation or licence conditions.

### 2017 IWSFG standard

1. An international group of wastewater representatives (**IWSFG**) including WSAA was formed in June 2017 in response to the change in focus of the work of Working Group 10 and to continue the work of developing an international flushability standard that reflects the concerns of the wastewater industry.
2. A draft flushability standard was released by the IWSFG for public comment in July 2017. The final version of the IWSFG flushability specification was published in June 2018 (**IWSFG standard**). The forward to the standard records:

The criteria for flushability and the test methods are the product of a global consensus of the coalition members and reflect the hydraulic, mechanical and environmental conditions of drain lines, various onsite treatment and wastewater collection and treatment systems as well as the receiving waters for treatment plant effluents.

1. The IWSFG standard refers to both the second and third editions of the INDA/EDANA Guidelines.
2. The IWSFG standard sets out five criteria “that need to be addressed for a product to be deemed suitable for flushing down the toilet”, namely:
3. Environmental protection.
4. Toilet and drain line clearance.
5. Disintegration.
6. Settling.
7. Biodisintegration.
8. Mr Drinkwater’s evidence was that the IWSFG standard adopts a similar structure to GD3. However, it omits the aerobic disintegration test, the household pump test and the municipal pump test. The function of the aerobic disintegration test is catered for by a fibre analysis. Mr Drinkwater agreed that the two pump tests are “subsumed” within the disintegration test because that test is “far stricter” than in GD3. Mr Drinkwater stated that, because of its strictness, provided a product passes that test, it is “extremely unlikely there would be a problem with the material at the pumps”.
9. The first criterion (safety in the environment and composition of materials) noted that to be acceptable the relevant product must pass the following two hurdles:
10. If the fibre of the product is identified as “plastic”, then the percentage by weight of the fibre identified as plastic shall be 1% or below.
11. No product shall have intentional plastic fibres as an ingredient.
12. The toilet and drain line clearance test is a modification of the GD3 test for toilet and drainline clearance test.
13. The disintegration test is a more demanding “slosh box” test than the “slosh box” test contained in GD3.
14. The tests for settling and biodisintegration are the relevant tests set out in GD3.
15. Having regard to the adoption of tests in the INDA/EDANA Guidelines by the IWSFG and the facts concerning the development of the guidelines set out below, I reject the ACCC’s suggestion that the INDA/EDANA GD3 Guidelines were “junk science”.

## INDA/EDANA Guidelines

1. KCA adduced detailed evidence concerning the history and development of the INDA/EDANA Guidelines. That history goes back to 2000, when Dr McAvoy and a team of research scientists at Proctor & Gamble, another manufacturer of non-woven products, commenced work to develop flushability testing protocols. That work included both laboratory work and field testing.
2. In about 2002, Dr McAvoy approached the Water Environment Research Foundation (**WERF**) to conduct a peer review of draft testing protocols developed by the Proctor & Gamble project team. WERF is a not-for-profit organisation which funds and arranges for research on water and wastewater treatment systems on behalf of its subscribers, which include wastewater utilities and wastewater equipment manufacturers. Approximately 160 wastewater utilities in the USA, as well as Sydney Water, QUU, SA Water and Water Corporation of Western Australia have been subscribers of WERF.
3. WERF appointed four wastewater treatment experts, from three tertiary institutions and a water consultancy firm (**peer review committee**), to review the draft protocols.
4. Following a review of the protocols and a site evaluation visit to Proctor & Gamble’s laboratory, the peer review committee concluded that the document “represents a fundamentally sound approach and provides sufficient methodological detail for the development of a successful and scientifically defensible product-testing program”.
5. The protocols were published in December 2003 as “Protocols to Assess the Breakdown of Flushable Consumer Products” (**WERF report**). The purpose of the report was to describe scientifically sound test methods that could be used to determine whether products were compatible with household plumbing fixtures, onsite treatment processes and municipal wastewater collection and treatment systems.
6. The executive summary of the WERF report identified the following guiding principles for developing an overall approach and test method for assessing flushability:

* Clear toilets and household drainlines under expected usage
* Be compatible with wastewater conveyance and treatment systems
* Not be visible in the environment within a reasonable period of time
* Be safe (nontoxic) in relevant environmental compartments.

1. Under the WERF report, the flushability of a product was evaluated by asking a series of questions directed at each stage of the household and municipal wastewater system, with the answers to those questions leading to a conclusion that a product was or was not compatible with that aspect of the system.
2. The WERF report acknowledged that it was “a first step in developing a widely accepted and comprehensive guidance manual for assessing the compatibility of flushable products in household and waste disposal systems”, it being the first protocol of its kind.
3. After the WERF report was published, in late 2003, Dr McAvoy approached INDA and EDANA to see whether there was interest in supporting an industry-wide initiative.

### GD1

1. In 2004, a joint INDA and EDANA taskforce – including 31 companies involved in the manufacture or sale of non-woven products in North America and Europe (including Proctor & Gamble and KCC) – was established to develop the first edition of the INDA/EDANA Guidelines (**GD1**).
2. In November 2005, a technical working group for GD1 was established. Dr McAvoy was the Chairperson of the technical working group and Mr Lortscher, then a research scientist at KCC, was also a member.
3. From November 2005 until around October 2006, members of the GD1 technical working group conducted a detailed review of the questions, pathways, test methods and acceptance criteria described in the WERF report, as well as other test methods that were being used by some manufacturers to assess flushability that were not included in the WERF report (for example, a “slosh box” test being used by KCC).
4. In around October 2006, the technical working group produced a draft GD1 guidance document, which included most of the tests from the WERF report, several new tests (including tests using KCC’s “slosh box”), and refined test method descriptions. Some tests from the WERF report were not included. The draft GD1 document was then provided to INDA and EDANA members, as well as the independent not-for-profit testing organisation, NSF International, to conduct a “pilot program” to further refine the test methods.
5. After the conclusion of the “pilot program”, INDA and EDANA invited wastewater experts from the USA and Europe to conduct a peer review of GD1. In addition to the four peer reviewers of the WERF report, several persons including Mr Drinkwater were invited to review GD1.
6. After a process of engagement with the peer reviewers, the final version of GD1 was published in June 2008. It was 202 pages long, including 138 pages describing the technical specifications for the 23 test methods, being eight “Tier 1” tests (which were compulsory), eight “Tier 2” tests, and seven “Tier 3” tests.
7. The ACCC drew attention to the following paragraph in a section entitled “Areas for Further Work”:

2.3.4 Establishing better ways to mimic compromised drainlines and sewers in the test methodologies.

It is very difficult to define precisely “properly maintained” pipes or “fit for use” pipes due to the complex nature and variation of conditions inherent in wastewater drainlines and sewers. There are legitimate concerns about whether the level of agitation present in the dispersability tests and the perfect condition of the laboratory test pipe apparatus contained in these guidelines provides the best base upon which to assess whether products will pass through and not clog pipes that are compromised, but still fit for use. We are aware that work is in progress in a number of quarters to develop methods that will help in this regard, and we recognize that this is an area for potential future improvement.

### GD2

1. An international taskforce for GD2 was established almost immediately after GD1 was published, largely to address concerns specific to the Dutch municipal wastewater treatment system (which operates in large areas that are below sea level) that had been identified in the peer review for GD1. Trial tests were arranged and carried out by the GD2 taskforce in Sweden in around late 2008 at the laboratory of the manufacturer that produced the most widely used municipal pump in the Netherlands (ITT Flygt), and a new test was developed for inclusion in GD2 based on that pump for products intended to be sold in the Netherlands.
2. In July 2009, GD2 was published. The main difference between GD1 and GD2 was the introduction of the Municipal Sewer Pump Test for the Netherlands, and the inclusion of a “Code of Conduct” that required EDANA members to comply with flushable labelling requirements. Each of the 23 tests that were included in GD1 were also included in GD2, with the same acceptance criteria. GD2 noted that there was still ‘work in progress’ arising from the GD1 peer review process, including an assessment and trialling of test methods that had been developed by Mr Drinkwater in the UK in around 2008 to assess whether products would snag on grit or rough surfaces in compromised drainlines. Mr Drinkwater was the only peer reviewer of GD1 to propose the inclusion of a snag test.

### GD3

1. In around mid-2010, a taskforce for GD3 was formed. By this time, Mr Lortscher – having used the test methods specified in the WERF report, GD1 and GD2 for several years – had formed the view that the “tiered” testing system and pathways approach was too complicated.
2. Throughout 2010 and 2011, the GD3 technical working group therefore sought to simplify the assessment framework and identify the most effective and critical tests from GD2 to be included in GD3.
3. At around the same time, Dr McAvoy and Mr Lortscher also assessed Mr Drinkwater’s snagging and grit tests, and considered that they were unsatisfactory tests, including because they were not repeatable and could not adequately predict an outcome.
4. By early 2012, the flushability taskforce had developed a new framework for GD3, which required 12 questions to be answered affirmatively in order for a product to be regarded as flushable (rather than the more complicated “tiered” pathways testing approach from the previous editions).
5. Following further testing, seven mandatory tests were identified by the taskforce for inclusion in GD3, including five tests that if satisfied would have enabled a product to pass the protocols in the WERF report, GD1 and GD2 (being (1) the household toilet and drainline test; (2) the settling test; (3) the household pump test; (4) an aerobic biodegradability test; and (5) an anaerobic biodegradability test) as well as two new additional tests for assessing dispersability (a slosh box test) and municipal pump compatibility (a municipal pump test). The test acceptance criteria for the two new tests were the subject of debate amongst the taskforce members, as they sought to reach consensus.
6. GD3 was published in August 2013. The background to the guidelines identify as the relevant objective “ensuring that the only nonwoven products that are flushed are those that are compatible with wastewater systems”. Relevantly, this was said to involve ensuring that “[a]ny product that is marketed as ‘flushable’ can be flushed down the wastewater system without adversely impacting plumbing or wastewater infrastructure and operations”. Under the heading “Principles for Assessing Flushability”, GD3 states:

For public health and hygiene reasons, there are products for which flushing represents not only an acceptable but also the most appropriate means of product disposal; providing they can be disposed via the wastewater system without causing harm.

The flushability of a disposable nonwoven product depends upon the physical and chemical attributes of both the product itself and of the wastewater and treatment systems through which it is disposed. Wastewater disposal and treatment systems differ by country and region, but commonly involve disposal via the toilet, conveyance via drainage pipes and physical, biological and chemical treatment processes.

Flushability is determined by a product’s fate, behaviour and effects during the various stages of toilet disposal and wastewater conveyance and treatment.

For a product to be deemed flushable there must be evidence indicating that it:

* clears toilets and properly maintains drainage pipe systems when the suppliers recommended usage instructions are correctly followed;
* passes through wastewater conveyance systems and is compatible with wastewater treatment, reuse and disposal systems without causing system blockage, clogging or other operational problems; and
* is unrecognisable in effluent leaving onsite and municipal wastewater treatment systems and in digested sludge from wastewater treatment plants that are applied to soil.

The Technical Assessment is designed to evaluate the ability of a product to conform to each of these above criteria. Consequently, when a product fulfils the requirements in this assessment, it is considered flushable and can be labelled as such in accordance with the INDA/EDANA Code of Practice.

1. The ACCC did not dispute that materials such as paper towels, facial tissues and baby wipes fail the INDA/EDANA GD3 Guidelines.
2. GD3 also included a “Code of Practice”, which required products that failed GD3 to be marked with a “do not flush” logo.

#### Mr Drinkwater’s report to UKWIR on GD3

1. In 2013, Mr Drinkwater co-authored a report to UKWIR on the INDA/EDANA GD3 Guidelines. The report contained the following conclusions:

i) The overall approach taken in the *3rd Edition Manufacturers Guidance* is relatively similar to that taken in the *Water UK/UKWIR Flushability Protocol*. This change from the very different approach previously taken by the manufacturers is very welcome.

ii) Of the nine stages specified in the *Water UK/UKWIR Flushability Protocol*, three of these stages have equivalent specified [sic] in the *3rd Edition Manufacturers Guidance*.

iii) Two of the other stages specified in the Water UK/UKWIR Flushability Protocol have similar tests specified in the 3rd Edition Manufacturers Guidance. The risk to the water industry of any differences is minimal. These tests are:

* UKWIR Stage 3 – WC Bowl Clearance Test.
* UKWIR Stage 8 – Settlement Test.

iv) Three of the remaining tests specified in the Water UK/UKWIR Flushability Protocol do not have similar tests specified in the *3rd Edition Manufacturers Guidance*. These are:

* UKWIR States 5 and 7 – Drainline and Sewer Disintegration Tests respectfully.
* UKWIR Stage 9 – Biodegradation Test.

The risks to the Water Industry from accepting the approach to disintegration taken in the *3rd Edition Manufacturers Guidance* could be significant.

The lack of a sewer disintegration test comparable to UKWIR Stage 7 in the *3rd Edition Manufacturers Guidance* is a serious concern.

The Biodegradation tests specified in the *3rd Edition Manufacturers Guidance* do not measure long term degradability. There is therefore a risk that a product which satisfied the pass/fail criteria in either of the manufacturers’ tests will not continue to degrade sufficiently to be able to satisfy the requirements or the *Water UK/UKWIR Flushability Protocol.*

1. The UKWIR Test Protocol, referred to earlier in these reasons, is the Water UK/UKWIR Flushability Protocol referred to in the conclusions set out above.
2. In relation to the drainline clearance test, the report states:

The risk of a product being accepted because of the less stringent standards in the [GD3] drainline test is minimal when compared with the requirements of the disintegration test.

1. In his evidence to this Court, Mr Drinkwater was more critical of the drainline clearance test, stating that it is “too complicated as it involves the use of simulated faecal matter and toilet tissue”. Mr Drinkwater stated that, for the test to be appropriate, it should be limited to seven flushes for the wipe to clear the drainline.

### GD4

1. Since the relevant period, a fourth edition of the INDA/EDANA Guidelines has been published, although it is not yet in force.
2. There were some unsuccessful efforts to collaborate with wastewater associations on GD4. Those efforts involved the National Association of Clean Water Agencies, the Water Environment Federation, the American Public Works Association and the Canadian Water & Wastewater Association. In early 2017, these four wastewater associations withdrew from the GD4 process stating, relevantly:

The wastewater associations want a GD4 that will protect all utility systems, and can only accept a GD4 that classifies wipes as “flushable” if the wipes break apart quickly after flushing and pass through a typical pump without accumulating in the pump.

…

As we move forward, our associations will be advocating to protect our wastewater utility members from the problems caused by all types of wipes. This will include requirements to ensure that wipes labelled “flushable” are truly safe to flush into sewer systems, as well as requirements for “Do Not Flush” labelling of non-flushable wipes. Until consumers can believe the “flushable” labels on wipes, our message will continue to be, “Only flush the 3Ps: pee, poop, and toilet paper”.

### ACCC’s criticisms of the INDA/EDANA GD3 Guidelines

1. The ACCC made the following criticisms of the INDA/EDANA GD3 Guidelines:
2. they are not an independent testing regime and were created based on a consensus between manufacturers: “as such, they allow the worst products to pass”;
3. they do not test for real world scenarios existing in the sewerage system; and
4. they do not test whether a product is easily dispersible which is the fundamental characteristic of a product intended for disposal via the sewerage network.
5. The ACCC emphasised the following evidence given by Mr Sheridan (as a clear and comprehensive explanation for the disconnect between the testing regime in GD3 and his experience in the actual operation of the Sydney Water network):

The systems thinking is that you need to consider all of the things and the way they interact and my comment is that I feel that the flushability guidelines have desegregated the journey of a wipe – and in this case, they’re referring to wet wipes, so I will use the term “wet wipes” in this context. So for something to be a flushable wet wipe, it needs to pass a number of tests and, if it passes all the tests – they’re described as a linear test, so if it passes each of the stages of the test, it has passed all the tests to qualify as flushable. My comment really goes to – the previous version asked, if you’ve gone through the first stages and you’ve escalated and you’re still not quite there, you do a field test. The thing about the field test is that it looks at all the things that are in the system and how they interact more so than the number of tests that it asked to be done through the flushability guidelines – things like the interaction of the flushable wipe with other gross pollutants that are in the system, whether it be oil or grease or other wipes or food scraps, and how that might affect that product as it goes through the system, and the main reason I say that is because of the aggregation we see in our systems and the blockages that it causes doesn’t seem to be tested in the flushability guidelines. That’s actually an example of the systems thinking would – they’ve tried to distil a flushability guideline – a bunch of tests – something that’s simple and doable – quite simple and straightforward – but to actually do that test – look at the way they might aggregate ... in a system would be difficult to reproduce in a laboratory, particularly with the number of different examples we might have in a system like Sydney. Doing a number of field tests would actually expose the product to the realities of what happens in a wastewater system. The flushability guidelines, in my view, are a nice try in terms of getting most of the steps that it will go through – flushing the toilet, out of the house, down the pipe, into the pump station, through the pump station and out to the treatment plant – and whether it would be bio­ disintegrating or not in the treatment plant or not is – that’s all tested. But when you put it all together and put it in a live system, there’s a few things that also might be happening that haven’t been considered in those series of tests.

#### Independence

1. The INDA/EDANA GD3 Guidelines are evidently a proactive endeavour on the part of manufacturers including KCC to avoid regulation which might constrain their business. A slide pack for the “Flushability Drafting Group”, which met in Brussels in February 2012 identified that this was one of the purposes of GD3, as well as the following:

* To simplify the flushability assessment approach:

○ Improve transparency

○ Improve ease of use

○ And maintain rigour

* To respond to ongoing issues and concerns being raised by Wastewater stakeholders in USA and Europe

○ Increased screenings, clogging and pump failures, land application of sludge.

1. The ACCC did not point to any product that passed the INDA/EDANA GD3 Guidelines that was the “worst product”. The fact that the INDA/EDANA GD3 Guidelines are the product of industry consensus is not a reason to reject them if they are otherwise reasonable or appropriate.

#### Testing for real world conditions

1. There are obvious potential difficulties involved in the development of tests of product performance in sewerage systems. These include: variations in infrastructure, including in the condition of the infrastructure; variations in the environments in which the infrastructure is located; and variations in the system contents including as a result of variations in consumer behaviours in placing materials into the system.
2. Professor Paschke acknowledged that it is very difficult to simulate the conditions that a product experiences during its life in a sewer. His evidence was that there was significant variability in the velocity of flows in the sewerage system, although an important aspect of the design of a waste water collection system is the “velocity within the gravity component so that it’s not too slow”.
3. As Mr Lortscher acknowledged “real world” tests can be hard to develop. Of course, this does not mean that appropriate laboratory tests cannot be developed. Mr Lortscher maintained his opinion that the KCC’s “testing scheme does reflect pretty much what goes on in the real world”.
4. Mr Sheridan expressed the view that ‘‘you should test [a product] where you’re going to use it, and that would be a systems view”. As a general proposition, this sounds sensible. However, it can readily be extrapolated to extreme propositions. There was no independent expert evidence to support a conclusion that the “flushability” of the KCFC wipes could not be determined without field testing in Australia.
5. Mr Drinkwater’s major criticism of GD3 was that it did not incorporate a “realistic and sufficiently stringent disintegration test”. Mr Drinkwater’s evidence concerning that test, also referred to as the “slosh box” test, was:

The test has a very low pass criteria, with 25% or more of the wipe passing through the sieve constituting a pass mark. A wipe which breaks up around the edges could pass the test with the remainder sitting in one piece and causing a blockage. The test is also not representative of conditions in the sewerage system. Also, the slosh box test, as specified in the Third Edition, does not include enough water for the test to be representative of real world conditions. In particular this lack of water increases the level of agitation and in doing so increases the likelihood of a product breaking up…

1. Mr Drinkwater also said that “[t]he poor level of disintegration in the Third Edition was in fact a backward steps from the Second Edition” and was “less stringent” than the disintegration requirement in the Second Edition. In cross-examination, Mr Drinkwater acknowledged that the GD3 test involved a shorter time frame (three hours instead of six hours) and a smaller sieve size (12mm instead of 25mm) but a lower pass through rate (25% instead of 95%). Mr Drinkwater agreed that, to determine whether a product would pass one test and not the other, it would be necessary to submit the product to both tests.
2. In cross-examination, senior counsel for KCA, Mr Sheahan SC, asked Mr Drinkwater about the disintegration test in the UKWIR Test Protocol co-authored by Mr Drinkwater. Mr Drinkwater agreed that, on this test, the product was required to break up to about 25mm in about three hours in a flask that was agitated by being placed on an orbital shaking table. Mr Drinkwater justified this test by saying:

If you’re looking in a drain line, if a product snags in a drain line or gets caught in a drain line, then provided within three hours it starts to break up to pieces of this size, it will not gather other objects behind it to start to cause a blockage … [I]f something does get flushed and it snags in the drain line, that’s not very desirable, but if within three hours it’s breaking up into small pieces and floating away, it’s not likely to cause a blockage.

1. Mr Drinkwater also stated that the swirling action produced by the orbital shaking table replicated conditions in a sewer or a drainline.
2. Mr Drinkwater volunteered:

We – we chose three hours because it was a compromise between what could be achieved introducing these wet wipes and what the water and the sewage industry could actually accept.

1. This observation makes plain there is no bright line which separates the flushable from the unflushable (assuming that the product is designed and marketed by the manufacturer to be flushed).
2. Based on the evidence set out above, the GD3 “slosh box” test does not replicate the variability of “real world conditions”. It is test of disintegration in the context of water and agitation, which are two important characteristics of the sewer environment. In these regards, it is comparable to the UKWIR Test Protocol disintegration test. It is also a test of the rate of disintegration by reference to a duration (three hours) that was selected for the comparable test in the UKWIR Test Protocol. However, I am not persuaded that the GD3 “slosh box” test is unreasonable or inappropriate as part of the basis for a claim of flushability by reason of its failure to replicate “real world conditions” without evidence that its pass mark created a not insignificant risk of harm to sewerage systems, materially beyond the accepted risk of harm from toilet paper.
3. In this regard, I note that the evidence does not permit a conclusion about whether a product could pass the GD3 “slosh box” test and fail either the GD2 “slosh box” test or the UKWIR Test Protocol disintegration test. The KCFC wipes passed both the GD3 and the GD2 tests.
4. A second criticism of the INDA/EDANA GD3 Guidelines made by Mr Drinkwater was that they did not test for real world scenarios in the absence of a sewer disintegration test.

On the basis of my more than 40 years of engineering experience and my experience working with WRc, my extensive research and my involvement in the ISO Working Group … I am of the opinion that the manufacturer tests as set out in the INDIA/EDANA Guidelines, which certain manufacturers rely on to conclude that their … wipes are “flushable”, do not translate to real-life sewer environments, for the reasons given above, and therefore are not appropriate in determining whether a wipe is flushable.

1. The UKWIR Test Protocol sewer disintegration test specified a “shake flask approach”. The requirement was for a six hour test and for the product to have achieved a greater degree of breakup than was the case in the three hour disintegration test, referred to above.
2. As appears above, the IWSFG standard does not incorporate a sewer disintegration test. However, it sets a slosh box test which requires that greater than 95% of an article’s dry mass must pass through a 25mm sieve after 30 minutes of testing. Mr Lortscher accepted that this test was much more rigorous than the GD3 slosh box test but expressed the view that it did not predict what happens in the real world. Mr Lortscher claimed that dry toilet paper “from countries throughout the world” did not pass the test.
3. Mr Lortscher rejected the proposition that the “low flow slosh test is more representative of normal usage in wastewater pipes”.
4. Again, without evidence that the absence of a sewer disintegration test in GD3 was likely to lead to a not insignificant risk of harm to sewerage systems beyond the accepted risk of harm from toilet paper, I am not persuaded that this omission rendered the INDA/EDANA GD3 Guidelines unreasonable or inappropriate as the basis for a claim of flushability.
5. The ACCC also submitted that the GD3 drainline test was unrealistic because it involved a “pristine” drainline. That criticism was not supported by Mr Drinkwater’s evidence.
6. The point was put to Mr Lortscher who rejected it, saying that he believed the GD3 drainline test very closely reflects what goes on in the real world in a residential setting. Mr Lortscher rejected the proposition that the drainline test would show very different results if it incorporated imperfections or cracks of the kind that are commonly experienced in Australia, saying that he has seen no evidence of that since he has been working in his lab.
7. Mr Lortscher also said that the legitimate concern about pipe quality in laboratory testing conditions was addressed by “high loading protocols”, that is, by putting large amounts of product in the pipes during flushing trials. Mr Lortscher also said that the test pipe was designed to have at least two 90 degree elbows and bends.
8. The variation to the GD3 drainline test that appears in IWSFG standard does not suggest that the test is flawed because of a failure to test for “real world scenarios”.
9. Without more evidence, in the light of its adoption with modifications in the IWSFG standard and in the absence of criticism from Mr Drinkwater, I am not satisfied that the GD3 drainline test was not a reasonable test of flushability.

#### Easily dispersible

1. The ACCC’s case was that the characteristic of being “easily dispersible” was fundamental to a product intended for disposal via the sewerage network. As noted above, Mr Lortscher agreed that the “dispersability” of a product is critical in determining whether it might cause a problem in the sewer and household drainline.
2. Dr Cabardo expressed the view that if a wipe takes longer than 30 minutes to break up, it does not break down in a similar manner and timeframe to toilet paper and “that it has to perform like the qualities of toilet paper ... to be received into [Sydney Water’s] sewers and our assets”. However, that view is not supported by evidence.
3. In order to be meaningful, the test of “easily dispersible” requires definition. To the extent that it refers to the behaviour of toilet paper, it begs the question whether a product that has inferior properties of break up and disintegration to toilet paper might nevertheless not present any materially greater risk of harm than toilet paper. To the extent that it refers to behaviour that avoids increased risk of harm to the sewerage system, the ACCC did not propose relevant criteria.

#### Conclusion

1. I accept KCA’s submission that the INDA/EDANA GD3 Guidelines represent a conscientious and scientific effort to establish an appropriate framework for assessing flushability, having regard to the difficulty in forming fixed and categorical views in relation to all aspects of flushability testing procedures and protocols within sewerage systems.

# Alleged representations

1. The parties were in dispute as to the representations conveyed by KCA’s various statements.
2. The meaning and effect of statements on a website or product packaging must be ascertained by reference to the context in which they appear: *Samsung Electronics Australia Pty Limited v LG Electronics Australia Pty Limited* [2015] FCA 227; (2015) 113 IPR 11 (***Samsung***) at [70]. In my view, the website statements do not provide context for the product packaging because consumer was likely to read the website statements in the absence of the product packaging and vice versa. Thus, the representations conveyed by the website and the product packaging are to be considered separately.
3. KCA contended, and I accept, that this question is to be decided by reference to what KCA’s conduct as a whole would convey to an ordinary reasonable consumer, as opposed to, for example, what consumers would understand a particular word like “flushable” to mean, citing *Aldi Foods Pty Ltd v Moroccanoil Israel Ltd* [2018] FCAFC 93; (2018) 358 ALR 683 at [86]. The ACCC submitted, and KCA did not dispute, that the class of consumers likely to be affected by KCA’s conduct was a broad class consisting of Australian supermarket shoppers, noting that KCFC wipes were widely available nationally in supermarkets alongside toilet paper and for use in combination with toilet paper.
4. The ACCC contended that KCA’s various statements conveyed the following representations:
5. the KCFC wipes had similar characteristics to toilet paper when flushed, as they would behave in a similar way to toilet paper in that they would break up or disintegrate in a manner and timeframe similar to toilet paper when flushed (**characteristics representation**);
6. the KCFC wipes would break up or disintegrate in a timeframe and manner similar to toilet paper (**disintegration representation**); and
7. the KCFC wipes were suitable to be flushed down the toilet and into sewerage systems in Australia (**suitability or “flushability” representation**).

## Characteristics representation and disintegration representation

1. KCA contended that the ACCC pleaded a wider representation as to the characteristics of the KCFC wipes, namely, that “the KCFC wipes had similar characteristics to toilet paper when flushed”. To the extent that this is correct, the ACCC did not press that wider representation.
2. In closing written submissions, the ACCC did not dwell on this aspect of its case. The ACCC argued that KCA’s marketing and packaging made a comparison and analogy with toilet paper as a “companion product” and that this necessarily conveyed that the KCFC wipes were similar but not identical to toilet paper, which is a commonly flushed manufactured product well-known to consumers.
3. The ACCC argued, and KCA did not dispute that the relevant class of consumer was familiar with toilet paper as a staple product, including its “use and disposal characteristics”. The ACCC argued that toilet paper should be taken to inform consumers’ understanding of what products are flushable. I have proceeded on the basis that the relevant ordinary reasonable consumer generally assumes that toilet paper is flushable into Australian sewerage and septic systems.

### Packaging

1. Focusing on the Sensitive Wipes packaging, I do not see any language that would convey anything to an ordinary reasonable consumer about the likely behaviour of the wipes when flushed except that might be inferred from the fact that they were “flushable”. To the extent that there was language which conveyed a comparison with toilet paper, there are the words “For best results, flush one or two cloths at a time”, which is not a recommendation that an ordinary reasonable consumer would associate with toilet paper. Further, the words “to be used with your regular toilet paper” convey that the wipes are not intended to be a substitute for toilet paper. The words “Cloths break down in sewerage system or septic tank” do not, without more, convey a comparison with toilet paper. In context, the logo does not convey to an ordinary reasonable consumer that toilet paper and KCFC wipes are interchangeable, but rather that they are complementary products.
2. I do not see any relevant difference in any of the other packaging.
3. Thus, I do not accept that these representations were conveyed by any of the packaging.
4. I also note that, to the extent that the ACCC contended that the packaging conveyed a representation that the KCFC wipes were “similar” to toilet paper in any respect, I disagree. The packaging plainly conveys that the wipes have a similar use to toilet paper and that they are flushable (although not equivalently flushable because of the recommendation to flush one or two cloths at a time), but that is not sufficient to support a conclusion that the alleged representations were made.

### Website

1. The Kids wipe page does not convey either of the alleged representations. In reaching this conclusion, I have considered the words relied upon by the ACCC in the context of the passage at [125(1)] above as a whole and also in the context only of the question and answer in which the words appear. The highpoint of the ACCC’s case is the sentence that concludes, “like toilet paper”. However, in my view, an ordinary reasonable reader would read that sentence in the context of the following sentence having regard both to the shortness of the answer and the word “However”. Read in context, the words convey that the wipes and toilet paper have a similar capacity to break down in a sewerage or septic system but that, having regard to the instruction not to flush more than two wipes per flush, there is some important difference in that capacity.
2. The Flushable Cleansing cloths page does not convey either of the alleged representations. I do not see any language that would convey anything to an ordinary reasonable consumer about the likely behaviour of the wipes when flushed except which might be inferred from the fact that they were “flushable”. An ordinary reasonable reader would probably infer from the statement reference to “no more than two wipes flushed at a time” that the wipes are materially different from toilet paper in relation to their flushability.
3. For the same reasons, I find that the Convenient cloths page does not convey either of the alleged representations.
4. The Flushable Cleansing cloths Refill page also does not convey either of these representations. In my view, to the contrary, an ordinary reasonable reader is likely to infer that the wipes are materially different from toilet paper in relation to their flushability from the words “A maximum of two wipes at a time”.
5. None of the Meet the family page, the You wouldn’t clean your car without water page or the Wipe your hands page contains anything more or different that conveys the alleged representations. In particular, I do not consider that an ordinary reasonable reader would infer any similarity with toilet paper from the words “completely flushable” in the terms of the alleged representations.

### Conclusion

1. The ACCC has failed to demonstrate that KCA made either of the characteristics representation or the disintegration representation.

## “Flushability” representation

1. KCA accepted that it made the “flushability” representation by the various statements identified by the ACCC, in the sense that the statements as to flushability conveyed to the ordinary reasonable consumer that the KCFC wipes, when used as recommended, were suitable to be flushed without causing problems to the ordinary operation of household and municipal wastewater systems (and hence were “compatible” with those systems).
2. Having regard to this concession and to the features of the packaging and the webpages set out above both of which are directed to Australian consumers, I find that on both its packaging and its webpages, KCA represented that the KCFC wipes were suitable to be flushed down the toilet and into sewerage systems in Australia. That is, I find that KCA made the “flushability” representation.

# Was the “flushability” representation with respect to a future matter?

## Meaning of “future matter”

1. Section 4 of the ACL provides relevantly:

(1) If:

(a) a person makes a representation with respect to any future matter (including the doing of, or the refusing to do, any act); and

(b) the person does not have reasonable grounds for making the representation;

the representation is taken, for the purposes of this Schedule [the ACL], to be misleading.

(2) For the purposes of applying subsection (1) in relation to a proceeding concerning a representation made with respect to a future matter by:

(a) a party to the proceeding …

the party … is taken not to have had reasonable grounds for making the representation, unless evidence is adduced to the contrary.

1. The ACCC contended that each of the representations which it alleged are best characterised as relating to future matters within the meaning of s 4 of the ACL.
2. The meaning of “future matter” is not defined in the ACL. In *Samsung* at [84], however, Nicholas J stated:

[W]hen read in context, the expression is not hard to understand. A “representation with respect to any future matter” for the purposes of s 4 of the ACL and, before it, s 51A, is a representation which expressly or by implication makes a prediction, forecast or projection, or otherwise conveys something about what may (or may not) happen in the future.

1. Samsung concerned representations as to performance characteristics of conventional 3D televisions and LG’s “Cinema 3D” televisions. Nicholas J observed at [85], with particular relevance to the present case, that:

It is important to distinguish between the representation actually conveyed by a product advertisement and what conclusions might be drawn from it. A person may reasonably infer from the statement “this is a 3D TV” that he or she will be able to view the TV in 3D at some time in the future. However, this does not change the fundamental character of the representation which is one made with respect to an existing state of affairs.

1. Nicholas J concluded (at [86]) that none of the relevant representations could be characterised as having been made with respect to a future matter. KCA noted that some of the pleaded representations in *Samsung* were that (as set out, for example, at [135] and [174]) the LG 3D TVs “appear substantially brighter than conventional 3D TVs” (a positive performance representation that could only become apparent at some future time when a consumer used the TV), that conventional 3D TVs “generate a dark viewing experience or provide a poor picture quality” (a negative performance representation by way of comparison to the product marketed and, again, could only become apparent upon use of the products in the future), and that “a viewer of LG passive 3D TVs enjoys consistently clear and bright 3D pictures lying down or leaning back” (a positive performance representation as to the effect of the product on the consumer at some future time).
2. An example of a representation as to a future matter is a representation that if a consumer “uses [a] product a particular health benefit will be obtained at some time in the future”: *Samsung* at [86], citing *Australian Competition and Consumer Commission v Giraffe World Australia Pty Ltd* [1999] FCA 1161; (1999) 95 FCR 302 at [123]-[124]. In the latter case, Lindgren J explained that representations as to the health benefit of the relevant product (mats which discharged negative ions that would reduce stress and assist in reducing cancer causing cells) were future representations because the respondent “was not merely representing matters of past or present fact: it was representing that the Mat would repeat its performance for the benefit of readers or listeners, as they case might be, if only they would buy it”. In contrast, as KCA noted, Lindgren J found that a representation that “[t]he ion mat emits negative ions” was not found to be a representation with respect to a future matter, even though it was a representation as to a performance characteristic, the truth of which might only be made apparent in the future.
3. In *Australian Competition and Consumer Commission v Purple Harmony Plates Pty Ltd* [2001] FCA 1062, Goldberg J also concluded that representations about the therapeutic benefits of using a product were representations with respect to future matters. At [18], his Honour said:

Almost all the representations were in terms which made them representations with respect to future matters. There were not merely representing matters of present or past fact; rather they were couched in terms that represented that the products presently possessed characteristics and benefits, the characteristics and benefits had been demonstrated to exist in the past and would be maintained and enjoyed in the future. Put shortly, the representations were saying that if a person was to buy the relevant product, it would display the relevant characteristic or produce the relevant benefit in the future after the purchase was made: see *Australian Competition and Consumer Commission v Giraffe World Australia Pty Ltd (No 2)* [[1999] FCA 1161;] (1999) 95 FCR 302 at 332.

1. Similarly, in *Commissioner for Fair Trading, Department of Commerce v Perrett* [2007] NSWSC 1130 at [121] to [123], Harrison J concluded that a representation that a product was an “anti-cancer” treatment was a representation as to a future matter because it conveyed that the treatment “would have some effect, presumably beneficial, upon [the patient’s] disease in the future if she used it.”

## Consideration

1. The ACCC argued that the representations each comprise predictions or forecasts as to how the KCFC wipes will behave when flushed and, similarly, how they will behave upon entering the wastewater network. Further, the representations relate to the benefits and characteristics of the KCFC wipes that will be exhibited once the products are used. All of the representations, according to the ACCC, can thus be characterised as relating to a performance characteristic of the product that only manifests at a future point in time after purchase and after use. These performance characteristics also manifest themselves in the context of an external and variable environment.
2. I am not satisfied that the “flushability” representation (or either of the alleged characteristics and disintegration representations) is a representation with respect to any future matter, for reasons identified by KCA which are as follows:
3. The “flushability” representation is expressed as a representation about the characteristics of the KCFC wipes as manufactured, that is, that the wipes are suitable for flushing. The representation is not couched in conditional terms, nor as a prediction. It does not depend upon whether or not some uncertain event occurred.
4. The fact that a consumer needs to actually use the product is hardly grounds to give the representations a futuristic quality. If that was the effect of s 4 of the ACL, then any representation made about the characteristics of goods sold in Australia, in respect of their intended use after sale, would be taken to be with respect to a future matter and the maker of the representation would be taken to have contravened the ACL absent evidence of reasonable grounds. It would substantially mischaracterise claims that something is “soluble”, “edible”, “dishwasher safe”, “water-proof” or “scratch resistant”, to describe them as predictions, forecasts or, in any substantial sense, representations as to future matters. Rather, in substance and effect, each is a statement of present fact as to the performance characteristics of the product as it has been manufactured. In the forms ending “-ble” the expression means “able to be” (dissolved or eaten or flushed as the case may be). As a matter of grammar and as a matter of substance that is an assertion in the present tense. And each such assertion is true or false whether or not the item is ever used as described. It is edible whether or not it is ever eaten. It is flushable whether or not it is ever flushed. The assertion is about the present quality of the thing.
5. The ACCC’s submission does not reflect the intention behind s 4, or its predecessor in s 51A of the *Trade Practices Act 1974* (Cth) (**TPA**). Allsop J traced the enactment history of this section in detail in *McGrath v Australian Naturalcare Products Pty Ltd* [2008] FCAFC 2; (2008) 165 FCR 230 (***McGrath***) at [165]-[195]. The particular mischief to which the section was directed was in overcoming the difficulty in obtaining “conclusive proof of dishonesty or recklessness from the surrounding circumstances without an admission of guilt from the defendant” in relation to statements, representations or predictions about future matters: Explanatory Memorandum, Trade Practices Amendment Bill 1986 (Cth) at [72], quoted in *McGrath* at [167]. Relevantly, the Explanatory Memorandum and the Senate Standing Committee for the Scrutiny of Bills both referred in this respect to the concepts of “promises”, “predictions” or “forecasts” when considering the proposed application of the section: see extracts quoted in *McGrath* at [167] and [169]-[170].

## Conclusion

1. Accordingly, s 4 of the ACL has no relevant application.

# Was the “flushability” representation false or misleading?

## Legal principles

1. Determining whether the representations are false, misleading or deceptive, or likely to mislead or deceive, requires the application of well-settled principles: *Specsavers v Luxottica* [2013] FCA 648 (***Specsavers***) at [49].
2. In this case, the relevant principles are:
3. a representation will be false, misleading or deceptive, or likely to mislead or deceive, if it induces or is capable of inducing error: *Australian Competition and Consumer Commission v TPG Internet Pty Ltd* [2013] HCA 54; (2013) 250 CLR 640 (***TPG Internet***) at [39] (French CJ, Crennan, Bell and Keane JJ);
4. having determined that a pleaded representation is established, it is necessary to ask whether, as a question of fact, the representation is false, misleading or deceptive, or likely to mislead or deceive: *Australian Competition and Consumer Commission v Telstra Corporation Ltd* [2007] FCA 1904; (2007) 244 ALR 470 at [14]-[15];
5. whether or not conduct is false, misleading or deceptive is an objective question of fact to be determined by the Court having regard to the evidence of the alleged conduct and to the relevant surrounding facts and circumstances: *Specsavers* at [49], citing, *inter alia*, *Campbell v Backoffice Investments Pty Ltd* [2009] HCA 25; (2009) 238 CLR 304 at [25] (French CJ) and [102] (Gummow, Hayne, Heydon and Kiefel JJ (as her Honour then was));
6. when the representation is directed to the public, the ordinary or reasonable person may be intelligent or not, may be well educated or not; the representations must be judged on ordinary or reasonable members of that class of the public to which it is directed: *Australian Competition and Consumer Commission* *v Coles Supermarkets Australia Pty Ltd* [2014] FCA 634; (2014) 317 ALR 73 at [43];
7. the legal principles relevant to finding that a representation is false or misleading in contravention of s 29 are the same as those that apply to s 18 of the ACL: cf. *Australian Competition and Consumer Commission* *v Dukemaster Pty Ltd* [2009] FCA 682 at [14]-[15]; and
8. the phrase “liable to mislead” in s 33 (and its predecessor s 55 of the TPA) has been held to apply to a narrower range of conduct than that comprehended by the phrase “likely to mislead or deceive” appearing in s 18: *Australian Competition and Consumer Commission* *v Turi Foods Pty Ltd (No 4)* [2013] FCA 665 (***Turi Foods***) at [79].
9. A contravention of s 33 will be made out if “there was an actual probability that the public would be misled’ by the impugned conduct: *Turi Foods* at [79].
10. The ACCC also noted that “where claims are made of a scientific nature, proof that there is no scientific foundation or no adequate scientific foundation for those claims may be sufficient to establish that the claims are misleading”: *GlaxoSmithKline Australia Pty Ltd v Reckitt Benckiser (Australia) Pty Limited (No 2)* [2018] FCA 1 at [49]. See also *Reckitt Benckiser (Australia) Pty Ltd v GlaxoSmithKline Australia Pty Ltd* [2018] FCAFC 138 at [41].

## ACCC’s case

1. In its closing submissions, the ACCC identified the following six reasons in support of a conclusion that the “flushability” representation was false and misleading:
2. The KCFC wipes did not have similar characteristics to toilet paper when flushed.
3. The KCFC wipes did not sufficiently break up or disintegrate in a timeframe and manner similar to toilet paper.
4. Unlike toilet paper, the KCFC wipes were, in part, comprised of regenerated cellulose (lyocell), and plastics (polyethylene and polypropylene) and were packaged for use in a wet or moist state.
5. Toilet paper breaks up or disintegrates in moving water within a period of a few minutes and loses its strength in water much faster than the KCFC wipes. The corollary of this is that the KCFC wipes did not break up or disintegrate in moving water as quickly or as easily as toilet paper; that is, within a few minutes.
6. The KCFC wipes are not suitable to be flushed into sewerage systems in Australia and cause or contribute to blockages and damage to household, drainlines and septic systems, and wastewater networks and infrastructure.
7. Passing the INDA/EDANA GD3 Guidelines is not a proxy for, or indicator of, suitability for disposal by flushing, including because they have been developed by the manufacturers and they do not constitute an independent testing regime, nor do they replicate real life sewerage system conditions. KCA represented that the KCFC wipes were “flushable”, not that they were “flushable as they complied with the INDA/EDANA Guidelines”.

### Dissimilar characteristics to toilet paper when flushed

1. It is clear that, generally speaking, toilet paper breaks down more quickly and easily than KCFC wipes and the rate of break down is a significant characteristic when considering flushability.
2. The ACCC sought an additional finding that the KCFC wipes did not easily break down and disperse in a timeframe that prevents the risk of harm to household and municipal wastewater systems. KCA dispute that a finding to this effect should be made.
3. In support of the additional finding sought, the ACCC relied on the following matters:
4. The different characteristics of toilet paper and the KCFC wipes, as shown by the Sydney Water agitation demonstration. As noted above, this demonstration shows how toilet paper and KCFC wipes act differently under similar forms of agitation. It does not, either alone or with other evidence, provide a basis for any conclusion about the risk posed by flushing KCFC wipes.
5. KCA’s effective acceptance that its wipes may reach the wastewater treatment plant intact and, as such, that they do not easily disperse, as evidenced by the following:
   1. The December 2014 email referred to at [163(7)] above which records: “my guess is that the expectation is that our wipes are removed during sewerage treatment processing with the solid material being separated out and sent to landfill”.
   2. The June 2015 email referred to at [163(10)] above which states “if you sit our wipes in a dish of water, with no agitation, they most probably won’t start to break up inside 30 minutes, but that’s why we refer to the standard test methods from EDANA to claim ‘flushability’”.
   3. The July 2015 email referred to at [163(11)] above saying “I’ve been hesitant to include any message about how long it should take to disperse in fear of setting ourselves up for being ‘tested’ by the media”.
   4. A letter from KCA to the ACCC dated 11 January 2016, in which KCA states:

Substantiation testing supports KCFC Cloths being described as breaking down “like toilet paper”, but over a longer period of time and in a slightly different manner to toilet paper.

* 1. An internal KCA email from Mr Foster to Ross Hearns and Geeta Uka dated 9 May 2013 that states that “You will always be able to find complaints on the internet etc about wipes as it is true that they do not break down as readily as dry product (hence the on pack instruction to only use 2 per flush)”.
  2. The internal KCC email dated 14 May 2014 referred to at [163(2)] above.
  3. In a KCC document dated 31 March 2016 headed “Key Messages”, the following: “Our wipes are designed to break down over time when passing through plumbing systems. They do take longer than dry toilet tissue to break down.”

1. The results of the Sydney water agitation demonstration.
2. I accept that the KCFC wipes did not break down as easily as toilet paper. Further, all things being equal, the KCFC wipes were likely to disperse more slowly than toilet paper within the sewerage system.
3. Concerning household systems, I do not accept that these characteristics presented a real risk of harm over and above the risk posed by toilet paper in the light of the evidence that toilet paper also does not break down or disperse in the household drainline and having regard to the minimal evidence that any such harm eventuated.
4. Concerning the municipal wastewater systems, in the absence of evidence that any such harm eventuated, I do not accept that the characteristics of KCFC wipes identified by the ACCC presented a risk of harm materially greater than the risk posed by toilet paper.

### Lack of break up or disintegration comparable to toilet paper

1. The ACCC contended that “far from breaking up or disintegrating in water within a period of a few minutes, the KCFC Wipes did not break up or disintegrate in half an hour”.
2. The ACCC referred to the internal KCC email, noted at [163(13)] above, which stated:

All other Hydraspun wipes … do not significantly lose strength after flushing as the strength comes from the hydroentangling of the fibres which is not easily reversible. So to have a highly dispersible Hydraspun wipe essentially means having a low strength to start with, creating problems in use.

1. The ACCC also referred to the “Competitive Flushability Performance” document, described at [163(12)] above, which compares three products including “Suominen Hydraspun”. This document suggests that the Hydraspun product failed on the “Dispersability slosh box”, “% Drainline strength Loss after 60 minutes” and “Municipal pump % increase” tests. In particular it records a score of 0% for the “% Drainline strength Loss after 60 minutes” test.
2. This is evidence that the KCFC wipes did not significantly lose strength after flushing and, in contrast to toilet paper, were not highly dispersible.
3. I accept that the KCFC wipes did not break up or disintegrate in a timeframe and manner similar to toilet paper. However, it is a separate question whether the capacity of the wipes to break up or disintegrate was “sufficient”.

### Composition and wet packaging

1. I have set out the facts above concerning the composition of the wipes. In summary, I accept that the KCFC wipes were composed, in part, of regenerated cellulose and plastics and were sold in a sealed package for use in a wet or moist state.

### Speed of disintegration

1. The ACCC contended that toilet paper breaks up or disintegrates in moving water within a period of a few minutes and loses its strength in water much faster than the KCFC Wipes. Conversely, the KCFC wipes did not break up or disintegrate in moving water as quickly or as easily as toilet paper; that is, within a few minutes.
2. Mr Hester’s evidence was that toilet paper begins to disintegrate quickly and to break up within a few minutes.
3. In response, KCA referred to the following evidence:
4. Professor Paschke’s evidence that he has seen lots of toilet paper on the screen at the wastewater facility countless times;
5. Dr McAvoy’s evidence that “even bath tissue [toilet paper] would not sufficiently disperse in a drainline” and “bath tissue … doesn’t disperse in a drainline”;
6. Mr Lortscher’s evidence that even dry bath tissue will not pass the IWSFG disintegration or disposability test;
7. Mr Lortscher’s evidence that screening is a natural process on waste treatment systems and screens out materials including faecal matter and dry toilet paper;
8. Mr Brown’s evidence that it is not uncommon to find solid pieces of faecal matter and toilet paper within the vertical section at the junction to the infrastructure sewer;
9. Mr Brown’s evidence of observing blockages in household drainlines which included toilet paper; and
10. comments in a document entitled “Draft responses to peer reviewers Comments”, relating to GD1, that “even toilet tissue does not break up during drainline transport because the turbulent forces are not great enough to cause break up”.
11. On balance, I am not satisfied that toilet paper breaks up or disintegrates in moving water within a period of a few minutes. Having regard to the evidence pointed to by KCA, I accept that the suitability of toilet paper for flushing into the Australian sewerage system does not depend upon an ability to break up or disintegrate in moving water within a period of a few minutes.
12. I accept that the KCFC wipes did not break up or disintegrate in moving water as quickly or as easily as toilet paper.

### Harm caused

1. My findings concerning the impact of the KCFC wipes upon Australian sewerage systems are set out above. In summary, I have found that the evidence does not support an inference that KCFC wipes contributed to or caused harm to household plumbing and the sewer network, except in relation to the cases recorded in customer complaints to KCA.
2. The ACCC pointed to five pieces of evidence to demonstrate the unsuitability of the KCFC wipes for flushing.
3. The first was KCA’s own decision to accelerate the development and introduction of “an improved flushable cloth”, which was said to further exceed the standards set by GD3. The new product, Queen, which was launched in Australia in May 2016, used a different base sheet.
4. The second and third were two KCA internal email exchanges. One was a February 2015 internal email exchanges which noted:

The current the [sic] base sheet is 98% cellulose, 2% synthetic fibre. Using the KC USA base sheet developmental learnings, we are looking to remove the synthetic fibre which has shown in initial testing to improve dispersibility ... this is a relatively small step in a longer journey...

And

Also as we are removing the synthetic element we would predict that the improved basesheet should be better in terms of biodegradability.

1. The other was the October 2015 email entitled “Moist wipe flushability issue”, which included the passage set out at [143(3)(f)] above.
2. Based on this evidence, by October 2015 KCA had a precise view about the extent of dispersion of the KCFC wipes, and did not expect them to fully disperse in the sewerage system. Earlier, by February 2015, KCA was taking steps to improve the dispersion of the wipes. Evidently, KCA recognised dispersion as an aspect of the quality of the KCFC wipes and, in 2015 and 2016, considered it desirable to improve the quality of the wipes in that respect.
3. While I accept that this evidence is consistent with a conclusion that the KCFC wipes were not fully dispersible, and therefore posed a risk of harm to the sewerage system, without evidence that this harm eventuated (except to the limited extent that I have found), it does not demonstrate that the KCFC wipes were unsuitable for flushing.
4. The ACCC contended that whether a product is suitable for disposal via the household and municipal wastewater treatment systems and processes must be understood in light of the following matters:
5. The sewerage system is only designed for removal of urine, faecal matter and toilet paper (and trade waste subject to limits).
6. The sewerage system includes imperfections such as tree root incursions, belly dips and misaligned pipes, both on customers’ properties and in the network. While only a proportion of pipes will have these defects, material that is flushed should be compatible with these features.
7. The fact that, while it is physically possible to flush materials other than urine, faeces and toilet paper into the sewerage system, such materials should break down and disperse easily, and in a timeframe that prevents damage to the network.
8. Broadly, the KCA did not dispute the ACCC’s case in this regard.
9. Next, the ACCC referred to the evidence from the wastewater authority witnesses as to damage caused by “flushable” wipes. However, as set out above, that evidence was not directed to “flushable” wipes but, rather, to wipes generally. In circumstances where there is ample evidence of wipe products that are significantly different in composition, size and wet strength to the KCFC wipes, the evidence of the wastewater authorities does not provide a basis to conclude that the sewerage systems have suffered damage caused by “flushable” wipes.
10. Contrary to the ACCC’s submission, I do not accept that the evidence of the wastewater authority employees demonstrates the highly unsuitable nature of “flushable” wipes, including the KCFC wipes, to be disposed of via the toilet.
11. Rather, the evidence goes to a different issue, which is the unsuitable nature of wipes more generally to be flushed down the toilet.
12. KCA acknowledged that there are many types of wipes that are not suitable to be flushed into the sewerage system. Examples included baby wipes, household cleaning wipes and industrial cleaning wipes. Its case was that KCFC wipes are an exceptional category, aptly described as “flushable” because of their particular properties.
13. In the face of the existence of other wipe products, it is not possible to infer that the wipe products, which undoubtedly caused or contributed to blockages and damage to household drainlines and septic systems, and wastewater networks and infrastructure, were KCFC wipes.

### INDA/EDANA GD3 Guidelines

1. Finally, the ACCC contended that “[p]assing the INDA/EDANA [GD3] Guidelines is not a proxy for, or indicator of, suitability for disposal by flushing, including because they have been developed by the manufacturers and they do not constitute an independent testing regime, nor do they replicate real life sewerage system conditions.
2. The ACCC pointed to the following evidence as to the insufficiency of the INDA/EDANA GD3 Guidelines:
3. The August 2013 statement that:

The test method acceptance criteria needed to be agreed and accepted by a consensus of all INDA and EDANA wipes manufacturers, which resulted in the poorest performing wipe being used as the acceptance criteria.

Mr Sheahan SC submitted, based on the evidence of Mr Lortscher, that this statement was wrong. Mr Lortscher’s evidence was that KCC had argued unsuccessfully for stricter test criteria in relation to the slosh box test but, ultimately, Mr Lortscher was satisfied that GD3 contained a satisfactory test for flushability because it would exclude products that should not be disposed of in the sewerage system, namely, baby wipes, feminine care products, household cleaning wipes, and products that were not designed to break down at all. Mr Lortscher’s evidence does not clearly falsify the statement if the “poorest performing wipe” refers to a wipe marketed as “flushable”.

1. A KCC internal report dated 20 January 2015 concerning “Project Trumpton”, which was a project concerned with improving the rate of dispersion of “moist toilet tissues”. The report noted:

Water authorities (UK & BE specifically) disagree with our standard of flushability – they believe that we are making their problems worse by encouraging consumers to flush wipe products and want us to increase our standards by which we self-regulate.

1. The August 2013 statement that:

The testing in the [INDA/EDANA] guidelines is designed to differentiate a wipe which has the ability to break-down to some extent from a wipe such as Baby Wipes or Facial Wipes which will definitely not breakdown and could cause a pipe or pump blockage.

The ACCC noted that this statement was corroborated in February 2015 by an internal KCC statement in February 2015 concerning the INDA/EDANA GD3 Guidelines, which said: “These are the tests that differentiate us from baby wipes, household wipes which are not flushable.”

1. Mr Richards’ observation, referred to earlier, that “[b]asically our flushable wipes do work best in a smooth high flow pipe system”.
2. A KCC 2015 PowerPoint presentation, which stated:

While there has been significant progress on dispersibility, there is growing pressure by wastewater authorities and ISO to have even stricter standards using test methods with lower agitation to better simulate sewer systems. KC is actively engaged.

1. As set out above, I have concluded that the INDA/EDANA GD3 Guidelines represent a conscientious and scientific effort to establish an appropriate framework for assessing flushability.
2. While there is continuing disagreement about an appropriate standard or standards for flushability, in the absence of substantial evidence of harm caused by flushing the KCFC wipes, in my view, the INDA/EDANA GD3 Guidelines were a reasonable benchmark for making a claim of flushability. Their reasonableness is demonstrated by the fact that they were developed by scientists to test for performance on several dimensions relevant to performance in the sewerage system, they have been adopted or followed in several respects by the UKWIR Test Protocol and the 2017 IWSFG standard and they have not been demonstrated to produce harmful outcomes.

### Conclusion

1. The “flushability” representation was not false, misleading or deceptive or likely to mislead or deceive.
2. If I am wrong in concluding that the “flushability” representation was not a representation with respect to a future matter, then it follows from my reasons above that KCA adduced evidence that it did have reasonable grounds for making the representation, and the ACCC failed to demonstrate that the representation was misleading.

# Conclusion

1. The proceeding will be listed for a case management hearing with a view to determining appropriate relief and penalty in relation to the “Made in Australia” representation, which the parties agree was made and was false or misleading.
2. I will also hear the parties on to the question of costs.

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| I certify that the preceding three hundred and thirty (330) numbered paragraphs are a true copy of the Reasons for Judgment herein of the Honourable Justice Gleeson. |

Associate:

Dated: 28 June 2019