

IWSFG Template for reviewer comments and IWSFG secretariat observation

Document reviewed: **PAS 1**

Due date:20

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| INDA | 13 | 13 | | Ge | The IWSFG implies that these documents may be used for standards development. While they may most certainly be considered in a standards process, using them in and of themselves for development of a standard is presumptuous in light of lack of multi-stakeholder agreement. INDA, EDANA, and other industry representatives would be willing to be part of any standards process to discuss moving forward with a globally accepted set of test methods and pass/fail criteria (by | <p>Suggest rewriting sentence to say :</p> <p>“Such purposes include use in a multi-stakeholder development of guidelines or standards.”</p> <p>The IWSFG is well within their rights to develop guidelines as they see fit.</p> | |

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| INDA | 16 | 24 | | Ge | <p>The statement made in this paragraph is misleading. The IWSFG takes unacceptable liberties in describing who actually has developed the criteria in this draft specification.</p> <p>First and foremost, the criteria discussed in this draft have been collected by a relatively small group of global wastewater “experts”, including only six voting members none of whom are from the UK and only one from Europe. With no line of sight to individual members participating from each country along with background and credentials, there is no validation of “expertise”. Use of terms like “worldwide coalition” and “global consensus” should be struck.</p> <p>In addition, three of the five “critical characteristics” described in section 6.2 are pulled verbatim (with one minor alteration) from INDA and EDANA’s 3rd ed. Guidelines for Assessing Flushability of Disposable Nonwoven Products (as referenced within this draft). In addition, the test method used in PAS 3 is sourced from GD3 (with parameter and pass/fail changes). In essence, adoption of this methodology points to the fact that INDA and EDANA members (along with wastewater representatives who have been involved over the years with these guidelines) are the true “experts” in developing guidelines such as these.</p> | <p>The proposed change is to rewrite the forward using the following messaging:</p> <p>1) The current makeup of the IWSFG members who worked on this document, including the background credentials of each and the process used to gain a “global consensus”.</p> <p>2) Acknowledgement that the majority of this document is due to the long-standing work of industry experts working with wastewater representatives over the years,</p> | |

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| INDA | 26 | 28 | | Ge | <p>As discussed in the Main Document from Draft 1, this language is unacceptable. Although the comment was "Not accepted" in the first draft, there was no reasoning behind the decision. In light of lack of an explanation, it needs to be brought up again.</p> <p>This statement is presumptuous. The IWSFG implies that not adhering to this standard precludes the possibility of being socially responsible or environmentally sustainable. The IWSFG has neither the expertise nor the authority to define what is meant by "socially responsible" and "environmentally sustainable". At best, this can be</p> | <p>Remove statement or reword to reflect this is an opinion of the IWSFG.</p> | |
| INDA | | | Section 1 | Ge | <p>There are numerous discussions within the introduction that are broad or nebulous. The authors have written the introduction as if the reader understands all aspects of a wastewater system.</p> | <p>We suggest including some general references for the reader on the basics of the wastewater system. The EPA has some nice documents that could be referenced.</p> | |

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| INDA | 71 | 73 | | Te | <p>To the best of our knowledge, the IWSFG have done no studies to look directly at causes of clogging and plugging in wastewater infrastructure. In fact, the only systematic study that we are aware of to look at clogs (Water UK study 2017) points to a wide variety of issues. Many of the issues identified in the UK study are not mentioned in your draft. In addition, even when clogs were discovered it appeared difficult in all cases to assign a cause. Here is an excerpt (from the Conclusions section in the Executive Summary of the report):</p> <p>5) The analysis of features associated with blockage locations, for which sufficient data was provided, showed a wide variability in the reason for the blockage having formed:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 11 were the result of features which are integral to drain and sewer system design in the UK, such as interceptor traps, backdrops, 90° bends etc. <input type="checkbox"/> 4 were the result of other unavoidable debris entering the pipe (gravel/deposits) and a sewer defect that was in need of repair. <input type="checkbox"/> 6 were due to inappropriate disposal practice; the flushing of a dishcloth, a curtain and at 4 sites, excessive volumes of wipes. <input type="checkbox"/> 3 were at locations where, despite adequate information being returned from site, there was no obvious cause. <input type="checkbox"/> 2 of the 7 sum... clogs recovered were caused | <p>In describing issues in the systems, it behooves the IWSFG to describe a holistic assessment of what, in fact, is actually happening.</p> <p>If the IWSFG wants to portray themselves as experts in wastewater, it is critical to do more than express opinions and conjecture as facts in these documents.</p> | |

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| INDA | 73 | 78 | | Te | In the context of these lines, mention of “chemicals” is outside of the scope of the IWSFG. In addition, “harmful to the environment” is a broad statement that strays into areas beyond the purview of the IWSFG. The language in this section simply needs to state that the IWSFG specification is aimed at physical compatibility with wastewater infrastructure. | <i>For example, various flushed products may comprise materials and chemicals that can be harmful to the environment; hence, such products should not be identified as “flushable”. The goal of the IWSFG is not to ban the production and/or use of these products, but to encourage manufacturers to clearly and prominently identify those products that do not meet the established IWSFG specifications as not being “flushable” and to encourage users to dispose of such products after use in a more</i> | |
| INDA | 89 | 99 | | | As in a previous comment, citation of the 2017 Water UK study is warranted here. Any other information that can be cited that details the size or nature of the problem would be beneficial. The IWSFG goes out of its way to cite literature reviews discussing plastics in the marine environment (an area well out of the expertise of its members), but fails to cite any references that support statements in areas more germane to this | Cite information that is pertinent to these statements. | |

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| INDA | 102 | 104 | | Te | To the best of our knowledge there have been no studies which point to “disintegrates or breaks into small fragments” as a criteria for compatibility . Again, this is conjecture on the part of the IWSFG. There are a continuum of material properties in items that are flushed. Materials may disintegrate or not and still be weak, while other materials remain strong throughout system travel. In many instances of root intrusion or other imperfections in systems, even toilet paper causes clogs. | <i>For material disposed through a toilet, <u>the IWSFG believes the key criterion is that it disintegrates or breaks into small fragments that therefore don't 'snag', 'rope' or block up screens or grills.</u></i> | |
| INDA | 104 | 106 | | Te | Fats oils and grease have no bearing on discussion in this document. These materials, as you have stated, are managed elsewhere. | Remove these lines. | |
| INDA | 107 | 113 | | Te | The discussion in this paragraph is focused mainly on chemical biodegradation – which may be misinterpreted by the ill-informed reader. The key concept in the entire paragraph related to this draft is the last sentence regarding settling. | See proposed change for next comment. | |
| INDA | 107 | 131 | | Ge | The content of these sections is, for the most part, out of context for the document in general. Since the only “critical characteristics” described in 6.2 that deals with biologic activity is anaerobic biodisintegration, it would be advantageous and less confusing to focus on that in this discussion. Use of the term “biodegradability” is dangerous since it has so many definitions and is part of the FTC Green Claim language. | Rewrite 107 – 131. Focus on the biological processes that the specification focuses on. Leave out those areas, such as processing chemicals in the liquid stream, that are not covered in the scope of this document. Again, as stated previously , a footnote to a general reference is warranted. | |

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| INDA | 136 | 137 | | Ge | The continued use of terms like "negative environmental impact" is unacceptable in this document. These specifications are not aimed at environmental impacts but are aimed at compatibility with wastewater infrastructure. The EPA through the CWA (Clean Water Act) continues to be responsible for determining impacts to the environment and mechanisms to avoid them. There are MANY more "environmental" events in wastewater systems from weather related issues than from clogs. (You can reference the state of NY's summary of SSO's and CSO's to see the truth in that statement - https://www.dec.ny.gov/chemical/90321.html .) The continued sensationalistic positioning of the IWSFG narrative is diluting the real effort that is necessary. | Remove statements in these documents that reference concepts linking "environmental impacts" to these specifications. | |
| INDA | 143 | 143 | | Te | To the best of our knowledge, distributors of retail products do not make the determination of whether or not a product is considered flushable. Retailers, brand owners, private label owners – these are groups responsible for requesting from a brand manufacturer or private label manufacturer a product that is acceptable for being marketed as | <i>A manufacturer or distributor may wish to identify as being flushable.</i> | |

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| INDA | 147 | 150 | | Te | Removing toilet paper from the scope of these specifications is acceptable. However, referring to the fact that ISO is working on a “standard” and until it is done toilet paper is within scope is unacceptable. If the ISO working group felt that this specification was acceptable for toilet paper, they wouldn't be developing a new one. In addition, it is my understanding that the ISO WG is only developing a test method – development of pass/fail criteria is not in their purview. | <i>Toilet paper is out of scope in of this document. because it is intended to be covered by a separate paper manufacturing standard being developed by the International Standards Organization working group ISO TC6 SC2 WG27. However, in the absence of an international standard on toilet paper disintegration, the IWSEFG suggests that toilet paper could be assessed against the IWSEFG PAS documents.</i> | |
| INDA | 172 | 177 | | Te | Although the IWSFG has positioned this specification as protective of infrastructure, there are two very important pathways missing from the list of critical criteria. The first is pump performance – both household and municipal. Since pump clogs are considered a primary cause of problems, having a pump test is necessary. In addition, a household pump is a smaller pump and is located very close to the toilet. The second missing pathway is related to biodisintegration. The method described in this draft is only for anaerobic biodisintegration. For some reason that is not clear, moving from draft 1 to draft 2, the IWSFG removed aerobic biodisintegration from the methodology. Aerobic performance is just as | Adopt FG503, FG505 (biodisintegration) and FG507 from the INDA/EDANA guidance document (3 rd ed.). | |

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| INDA | 178 | 179 | | Te | <p>The language within this specification related to meeting critical criteria is nebulous. If the purpose of this document is to define what can and what can't be flushed – then stating that a product “should” meet the criteria implies that it's OK if it doesn't.</p> <p>The language within the INDA/EDANA 3rd edition guidance document is very clear – if you don't meet the seven test methods, you cannot make a claim of flushability.</p> <p>The language in this document must be clarified to indicate a product MUST meet the critical characteristics to carry a flushable label. If a requirement is mandatory in the eyes of the IWSEF, it MUST pass if a requirement is</p> | Change “should” to “must.” | |
| INDA | 183 | 183 | | Te | See line 178. | Change “should” to “must.” | |
| INDA | 184 | | Table | Te | <p><i>Essentially that no plunger should be required to address blockages.</i></p> <p>First the word “essentially” is not very clear. Second, since the INDA/EDANA FG501 method involves the use of simulated fecal material, care should be taken to insure the pluggage requiring a plunger is actually due to the product and not to the other materials used in the test. Language to that effect is in place in section 7.2.</p> | <p><i>Toilet and Drainline Clearance Test with a modification to the acceptance criteria as noted in Section 7.2. Essentially that no plunger should be required to address blockages.</i></p> | |

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| INDA | 184 | | Table | Te | It is unclear based on the discussion in this document how the IWSFG views the TAPPI 401 fiber analysis method. Why is the TAPPI method under Environmental and Health Protection, and how is it to be used ? | Clarify position in 7.1. What is the requirement, how is the method to be used, what are the criteria ? | |
| INDA | 185 | 188 | | Te | A testing laboratory can test to a "standard", a "guideline", or a "test method" provided by a customer. A testing laboratory can be certified, or accredited, as described in lines 187 and 188. However, for a testing laboratory to supply a "conformity assessment and certification" requires a formalized program to be initiated. The job of a testing lab outside of a formalized certification program is to provide data. It is up to the data requester to make the assessment. It is acceptable to recommend to a user of these specifications that they have 3 rd party test data as opposed to internal test data to affirm they meet the specification. | Conformity assessment and certification of flushable products is Testing in reference to these specifications is recommended to be undertaken by third party laboratories processes, by organizations accredited to ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. | |
| INDA | 192 | 194 | | Te | The 2 nd edition Code of Practice for labeling does not address how a "flushable" product should be labeled. The COP only makes reference to labeling of products that are determined to require a DNF (do not flush) symbol. | Remove 6.4.1 | |

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| INDA | 201 | 203 | | Te | <p>This is an acceptable and necessary position to be taken by the IWSFG. The language here is very similar to the language within the INDA/EDANA 3rd ed GD:</p> <p>GD3: <i>Before undertaking a Flushability Assessment, manufacturers are expected to have verified the human and environmental safety of all components of their finished products and complied with all relevant legislation and regulations in bringing a product to market. In this way, not only wastewater infrastructure is protected, but also public health and the broader Environment.</i></p> | | |

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| INDA | 204 | 206 | | Te | <p>There are several questions and issues that arise with the section on "plastic" fibers. Although the IWSFG has done a better job defining what is meant by plastic, it continues to cite the use of the TAPPI method. There were numerous issues brought up in the first draft in reference to having NO plastic fibers and using this test method. There are no discussions or references in this text regarding the use of the method – it simply says there "should" be no plastic fibers present and references the TAPPI method which is geared more toward the identification of a variety of naturally occurring fibers.</p> <p>Several of the references cited by the IWSFG in support of this position are focused on fibers in the marine environment. The science on the effect and source of these fibers is still under investigation. Numerous credible and referenced comments were made on this subject in the first draft document – these were ignored by the IWSFG as being irrelevant.</p> <p>Clearly, the focus of the IWSFG should be to insure the fibers present in "flushable" products can biodegrade in the waste water treatment system.</p> | <p>Remove 7.1.2</p> <p>Adopt FG505 and rely on performance tests to identify products that will not biodegrade in treatment systems.</p> | |

