

# NONWOVEN FABRIC PRODUCT ANALYSIS SUMMARY REPORT

## **Nonwoven Fabric Product Analysis Summary Report**

Prepared for The City of London Wastewater Treatment Plant

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### Background and Introduction:

Non-biodegradable products such as wet wipes, grease and cooking fat can cause obstructions within sewer systems, resulting in solidified masses that require specialized equipment and manual removal in order to restore regular operation (Oxford Dictionaries, n.d). These calcified masses are known as *fatbergs* and occur in sewer systems all around the world, causing adverse effects on city infrastructure and operations as a result. The Association of Nonwoven Fabrics has set out guidelines outlining proper packaging requirements for wipe products with the aim of reducing the number of products wrongfully being flushed into our sewer and septic systems. Despite these efforts, there is still an overwhelming number of products on the market that do not meet these packaging guidelines, resulting in misinterpretation regarding product disposal to consumers that ultimately leads to further contributions in the development of fatbergs and adverse impacts on infrastructure and operations.

In order to mitigate the development of these fatbergs, it is important to increase public awareness regarding flushable waste and their effect on sewer systems while simultaneously raising awareness to the violations of the Code of Practice by the wipe industry themselves. This report sets out to highlight the findings of an analysis of the packaging of 25 nonwoven fabric products and their violations of industry Code of Practice.

### Packaging Analysis:

There were 25 wipe and tissue products that were analyzed with the aim of assessing packaging compliance with the *Code of Practice: Communicating Appropriate Disposable Pathways for Nonwoven Wipes to Protect Wastewater Systems*. This Code of Practice was

developed by the Association of the Nonwoven Fabrics Industry in 2017 and it is interesting to note that very few, if any of these products comply with their own industry standards as indicated by our findings below.

Out of the 25 products analyzed, 12% were distinctly labeled as flushable and included circumstantial flushable instructions that outlined specific instances for when, where and how the products should be flushed. Although labelled as flushable, these products also included specifications on instances when they should *not* be flushed, including complying with municipal regulations and septic system capabilities/limitations, as seen in *Figure 1*.

The remaining 88% of the products analyzed were not distinctly labelled as flushable and 100% of these did NOT meet the Standard Code of Practice developed by the Nonwoven Fabrics Industry. Out of these 22 products, only eight had the do not flush (DNF) logo (See *Figure 2*) and still did not meet the size, colour or symbol placement requirements for this logo as outlined within the Code. *Figure 3.1* and *3.2* illustrate an example of good symbol placement and colour contrast on the TENA wipe packaging, however, the DNF logo on this package violates the required symbol size - measuring 15mm in diameter while industry standards require a diameter measurement of least 25mm. While analysis found that companies such as Huggies (*Figure 4*) did meet the size requirements for their DNF logo, the colour contrast used was in violation of the industry standards, as the logo is hardly visible due to its similar colour scheme with the rest of the package, causing it to blend in and remain unnoticeable. Regarding the placement of the DNF logo, *Figure 5* shows inadequate placement of the logo and disposal instructions as they are peeled off the Kleenex box and disposed of before use.

It is important to note that ALL of these 22 products are REQUIRED to have the DNF logo, as outlined in section 3 and 4 of the Code of Practice, which states that any product with

significant potential to be flushed and/or labelled as a baby wipe must have the Do Not Flush Logo.

Another interesting finding as a result of this analysis is the placement of key product use and disposal information, which should be easily identifiable consumers in order to make informed decisions regarding the appropriate actions following product use. This is shown in *Figure 6.1* and *6.2* which show the clear obstruction of the disposal instructions, as consumers would need to peel back the fold on the packaging in order to obtain the information.

### **Conclusion:**

In conclusion, it is evident that the nonwoven product industry fails to comply with their own Code of Practice. This is apparent through the analysis of products not advertised as flushable showing a 100% violation regarding packaging standards through improper logo placement, size, colour contrast and formatting, further contributing to consumer misuse and improper disposal.

### References

Fatberg. (n.d). In *OxfordDictionaries.com*. Retrieved from

<https://en.oxforddictionaries.com/definition/fatberg>

INDA Association of the Nonwoven Fabrics Industry. EDANA. (April 2017). *CODE OF*

*PRACTICE: Communicating Appropriate Disposal Pathways for Nonwoven Wipes to*

*Protect Wastewater Systems*. Second Edition, pp 1-7.

Tables

Table 1: Product Spreadsheet

| Brand                    | Product Name                          | Advertised as Flushable | Is the DNF symbol visible with product on shelf? | Is the DNF symbol near point where you take the wipe out? | Is the DNF symbol obscured by packaging seals/folds? | The DNF symbol artwork has high contrast. | Is the DNF symbol the correct size for the package size? |                       |             | The package has clear and explicit disposal instruction. | Optional: Package has the tidy man symbol. | Does product have secondary packaging? | Does secondary packaging have DNF logo? | Is there significant potential for the product to be flushed? | Does the product comply with the code of practice? |
|--------------------------|---------------------------------------|-------------------------|--|---|--|---|--|-----------------------|-------------|--|--|--|---|---|--|
|                          |                                       |                         |  |   |  |   | Symbol Size (diameter)                                   | Pkg Size (cm squared) | Right size? |  |  |  |   |   |  |
| EuroSpa                  | Most Flushable wipes 6"x5.25"         | yes                     | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | Present, circumstantial                                  | no   | no                                     | N/A                                     |   |  |
| EuroSpa                  | Most Flushable wipes 5.7"x7.8"        | yes                     | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | Present, not visible, circumstantial                     | no   | yes                                    | no                                      |   |  |
| Wetkins                  | Hand and face wipes                   | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Tena                     | Classic washcloths                    | no                      | yes  | yes   | no   | yes                                       | 15mm   | 486                   | no          | no   | yes  | ?                                      | ?                                       | yes, logo required  | FAIL   |
| Fluffs Supremes          | Unscented baby wipes with aloe        | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | no - only says DNF                                       | yes  | no                                     | N/A                                     | baby wipe, logo required                                      | FAIL   |
| Fluffs Supremes          | Scented baby wipes with aloe          | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | no - only says DNF                                       | yes  | no                                     | N/A                                     | baby wipe, logo required                                      | FAIL   |
| Luxe Beauty Care Premium | Retinol cleansing cloths              | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes  | no   | yes                                    | no                                      | yes, logo required  | FAIL   |
| So Fresh So Clean        | Cool cucumber cleansing wipes         | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes  | no   | yes                                    | no                                      | yes, logo required  | FAIL   |
| Kirkland Signature       | Most Flushable wipes                  | yes                     | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes  | no   | no                                     | N/A                                     |   |  |
| Kirkland Signature       | Daily facial towelettes               | no                      | no   | no, on the back   | slightly by fold                                     | no  | 10mm   | 182cm                 | no          | yes, covered by fold                                     | no   | yes                                    | yes, on side, not shell visible         | yes, logo required  | FAIL   |
| Kirkland Signature       | Baby wipes                            | no                      | yes  | yes   | no   | yes                                       | 16mm   | 362cm2                | no          | yes, but one of two is blocked                           | no   | no                                     | N/A                                     | baby wipe, logo required                                      | FAIL   |
| Huggies                  | One and done                          | no                      | yes  | no  | no   | no  | 14mm   | 304cm2                | no          | no   | yes  | yes                                    | yes, small, questionable contrast       | baby wipe, logo required                                      | FAIL   |
| Huggies                  | Natural Care baby wipes               | no                      | yes, low contrast                                | yes, low contrast   | no - low contrast; yes - high contrast               | 1 of 2                                    | 15mm   | 250cm2                | yes         | no   | yes  | no                                     | N/A                                     | baby wipe, logo required                                      | FAIL   |
| Lysol                    | Disinfecting wipes                    | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | N/A  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Wet Wipes                | Hand and face moisturizing towelettes | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | no   | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
|                          | Orange wipes                          | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | N/A  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
|                          | Multisurface wipes                    | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | no   | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Merida                   | Cleansing wipes                       | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Dead sea oasis           | Wet cleansing towelettes              | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes, obstructed  | no   | yes                                    | no                                      | yes, logo required  | FAIL   |
| Pampers                  | Complete and clean baby wipes         | no                      | yes  | no  | no   | yes                                       | 12mm   | 352                   | no          | no   | yes, but on bottom                         | no                                     | N/A                                     | baby wipe, logo required                                      | FAIL   |
| Clorox                   | Disinfecting Wipes                    | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | yes  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Kleenex                  | 2 ply tissues                         | no                      | no   | yes, on part that you rip off                             | gets ripped off                                      | yes                                       | 13mm   | 270                   | no          | no   | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Kleenex                  | Multicare large tissue                | no                      | no   | yes, on part that you rip off                             | gets ripped off                                      | yes                                       | 13mm   | 239                   | no          | no   | yes, gets ripped off                       | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Royal                    | Original tissues                      | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | N/A  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |
| Scotties                 | Original tissues                      | no                      | N/A  | N/A   | N/A  | N/A                                       | N/A  | N/A                   | N/A         | N/A  | no   | no                                     | N/A                                     | yes, logo required  | FAIL   |

Figures

Figure 1: Europspa Moist Flushable Wipes Showing Disposal Instructions

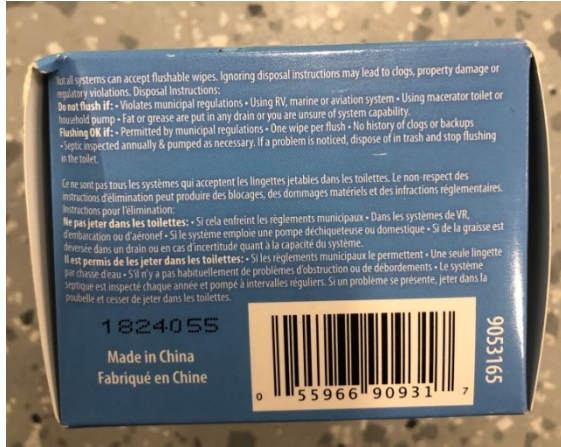


Figure 2: DNF Logo



Figure 3.1 and 3.2: TENA Wipes Showing Violation of DNF Logo Size

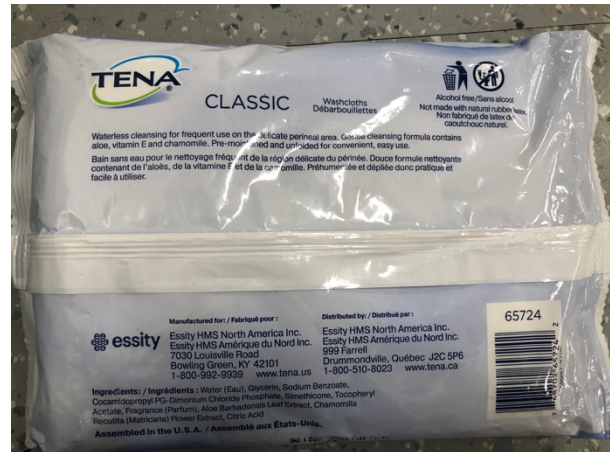


Figure 3: Huggies Natural Care Wipes Showing Inadequate DNF Logo Colour Contrast



Figure 5: Kleenex Box Showing Inadequate Logo Placement



Figure 6.1 and 6.2: Kirkland Baby Wipes Showing Obstruction of Clear Disposal Instructions

