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Adam Krantz

April 15, 2019

D.C. Department of Energy and Environment
1200 First St. NE, 5th Floor
Washington, DC 20001
Submitted by email: wipesrule@dc.gov

Re: DOEE Nonwoven Disposable Products Labeling Proposed Rule Comments

The National Association of Clean Water Agencies (NACWA) appreciates this opportunity to comment on the rule proposed by the District of Columbia (DC) Department of Energy and Environment (DOEE) for nonwoven disposable products labeling. NACWA represents the interests of over 300 publicly owned wastewater treatment agencies nationwide, including DC Water. DC Water and other NACWA utility members have experienced significant problems associated with wipes and other consumer products that are flushed. NACWA supported the DC *Nonwoven Disposable Products Act* as an important step towards reducing these problems for DC Water by requiring a flushability standard for wipes labeled “flushable” and appropriate “Do Not Flush” labeling on non-flushable wipes.

DC Water submitted a letter to DOEE on September 20, 2017, detailing the work done by NACWA and other water sector associations on the wipes issue and providing recommendations for this rule. This letter reflected NACWA’s recommendations regarding wipes at the time, but after this letter was sent, work on the wipes issue continued and flushability guidelines have been updated. NACWA’s recommendations have therefore evolved since the 2017 DC Water letter. NACWA now recommends that DOEE revise the proposed rule to adopt the International Water Services Flushability Group (IWSFG) flushability specifications as the method for determining if a nonwoven product is flushable. NACWA also recommends that DOEE use the 2nd Edition INDA/EDANA¹ *Code of Practice: Communicating Appropriate Disposal Pathways for Nonwoven Wipes to Protect Wastewater Systems*, with some modifications, as the basis for labeling non-flushable products. These recommendations and their rationale are explained below.

¹ INDA is the Trade Association of the Nonwoven Fabrics Industry, and EDANA is its European counterpart. These associations have developed a series of flushability guidelines (FG) for nonwoven products, commonly known as wipes.

Determination of Flushability

NACWA recommends the IWSFG flushability specifications for the DOEE rule because they provide a comprehensive and practical approach to evaluating whether products are safe to flush. The IWSFG is a coalition of national and regional water utility associations, individual wastewater utilities, and other organizations concerned about the problems caused by flushed consumer products. The IWSFG was established in 2017 and currently has six national association members from Australia, Canada, Japan, New Zealand, Spain, and the US. NACWA is the US national association member of the IWSFG. The IWSFG published its flushability specifications on June 5, 2018, after accepting public comments on two draft versions. The specifications are designed to protect public infrastructure for collecting, transporting, and treating wastewater and consist of three publicly available specification (PAS) documents:

- IWSFG PAS 1: 2018 *Criteria for Recognition as a Flushable Product*
- IWSFG PAS 2: 2018 *Terms and Definitions for Determination of Flushability*
- IWSFG PAS 3: 2018 *Disintegration Test Methods – Slosh Box*

These three PAS documents are designed to be used in conjunction with one another to ensure that products classified as “flushable” will not harm public infrastructure. As explained in PAS 1, the five criteria that a product must meet to be considered “flushable” are, along with the reference documents:

- Environmental Protection – TAPPI/ANSI Test Method T 401, *Fiber Analysis of Paper and Paperboard*;
- Toilet and Drain Line Clearance – As outlined in INDA/EDANA *Guidelines for Assessing the Flushability of Disposable Nonwoven Products*, 2013, FG501: *Toilet and Drain Line Clearance Test* with a modification to the acceptance criteria as noted in Section 7.2 of PAS 1 – no plunger shall be required to address blockages;
- Disintegration – IWSFG PAS 3: 2018 *Disintegration Test Methods – Slosh Box*;
- Settling – As outlined in INDA/EDANA 2013, FG 504: *Settling Test*; and
- Biodisintegration – As outlined in INDA/EDANA 2013, FG506: *Anaerobic Biodisintegration Test*.

When the IWSFG specifications were developed, the 3rd Edition INDA/EDANA 2013 flushability guidelines were still in use. INDA/EDANA published their updated, 4th Edition guidelines in 2018. The IWSFG will be updating its flushability specifications later this year to reference the INDA/EDANA 2018 guidelines, which are also used as criteria in the DOEE proposed rule.

NACWA recommends that DOEE revise the proposed rule to follow the IWSFG flushability specifications, or future versions of the specifications, which will include references to the INDA/EDANA 2018 test methods. The changes recommended for each of the DOEE’s proposed criteria for flushability are discussed below.

Drain Line Clearance

The DOEE proposed rule uses the INDA/EDANA Toilet and Drain Line Clearance Test, FG501.R1(2018), with some changes to the pass/fail criteria. The INDA/EDANA criterion is that no more than one flush can be associated with clogs that require use of a plunger to clear the product. The

DOEE proposed rule increases this to three flushes. The IWSFG also uses the INDA/EDANA Toilet and Drain Line Clearance Test, but specifies that no flushes may be associated with clogs requiring a plunger. Since a product labeled “flushable” should easily pass through a toilet and drain line without the use of a plunger, NACWA recommends that DOEE use the FG501.R1(2018) in its entirety. The next version of the IWSFG flushability specification is also expected to use FG501.R1(2018) in its entirety.

Slosh Box Test

NACWA agrees with the use of the IWSFG PAS 3: 2018 test procedure in the DOEE proposed rule. However, NACWA recommends that the DOEE pass/fail criteria be changed to match the IWSFG pass/fail criteria, stated in the IWSFG flushability specification as follows:

“If there is material left on the 25 mm sieve after the 1-minute rinse, the percent of the total initial dry mass passing through the 25 mm sieve for the five (5) test specimens after 30 minutes of testing shall be greater than 95%. This result shall be supported with visual examination and pictures of solids on the sieve, as described in IWSFG 2018: PAS 3.”

The visual inspection pass/fail method proposed by DOEE is more subjective than this IWSFG pass/fail criteria. Although NACWA previously recommended this visual method, the ongoing work on wipes showed that the sieve method is more consistent.

The IWSFG slosh box test procedures and pass/fail criteria are more appropriate than those in the INDA/EDANA flushability guidance because the IWSFG test procedures better represent the physical conditions of a typical municipal sewer system. Wipes tested with the INDA/EDANA procedures experience far more turbulence than they would in a real sewer system and for too long a time. The INDA/EDANA pass/fail criteria are also too lenient, with only 60% of the wipe required to disperse. This is not adequate to prevent the wipe from contributing to clogs, blinding of screens, or other operational problems for wastewater equipment. The IWSFG test also falls within the force range of the 11,000-29,000 Reynolds Number for typical sewer systems, as established in Section 6.1.1 of the ISO Technical Report (TR) 24524, *Technical Report on the hydraulic, mechanical and environmental conditions generally found in wastewater transport systems from toilets through to wastewater treatment plants, and the related context*. This wipes industry and the water services sector both contributed to this report.

Settling Test

NACWA agrees with the use of the INDA/EDANA Settling Test FG501.R1 (2018) and pass/fail criteria.

Biodisintegration/Biodegradation Tests

NACWA agrees with the use of the INDA/EDANA Anaerobic Biodisintegration Test FG 506.R1(2018) Part A and pass/fail criteria. However, the INDA/EDANA Biodegradation Test FG 506.R1(2018) Part B should not be used as an option because it allows wipes with a high plastic content to pass.

Other Recommendations

NACWA supports DOEE not using a municipal pump test in its rule. This test is used to determine if wipes cause malfunction or excessive power use for a pump typically used in wastewater collection systems. The INDA/EDANA Municipal Sewage Pump Test FG.507.R1(2018) allows too much stress on

the pump and accumulation of wipes in the pump. The wastewater associations believe that no accumulation in a pump is acceptable for a product that is marketed as flushable. Test data show that an average of 1% power increase over base power draw during a test run is the threshold value for not having any wipes accumulating in the pump. The INDA/EDANA allows an average increase over baseline of 5%.

NACWA believes that a municipal pump test is not necessary because wipes that pass the IWSFG slosh box test will be sufficiently weak and broken up to not cause problems in pumps. Additionally, the testing apparatus is not readily available in the US.

Labeling of Nonwoven Disposable Products

NACWA generally agrees with the DOEE proposed requirements for labeling nonwoven disposable products, but some improvements should be considered. NACWA worked with INDA and other associations on updating the INDA Code of Practice (COP) for labeling non-flushable products to ensure that the “Do Not Flush” instruction was clearly visible to consumers. The resulting 2nd Edition COP provides requirements that will result in adequate “Do Not Flush” labeling if followed in good faith. However, in practice, the COP has not worked well for labeling non-flushable wipes. The COP is voluntary, and many wipe manufacturers are choosing not to follow it, which is why DOEE’s labeling regulation is necessary. Manufacturers that are using the “Do Not Flush” logo often make the logo smaller than required in the COP. The most significant problem is that although the COP states that “Do Not Flush” logos “should have sufficiently high contrast with the background to be highly readable (i.e., dark on a light background),” the logo is often camouflaged by using similar colors for the logo and background. NACWA recommends that DOEE specify that the logo that is red, or that matches the logo developed by INDA. If the background color of the package is red or red-toned, then the logo should have sufficient white space around it so as to be visible.



DOEE’s proposed requirement that the “Do Not Flush” logo cover at least 10% of the surface area of the side of the package on which it is presented will result in a logo that is easy for consumers to spot. NACWA recommends that DOEE clarify that the logo should be placed on the package in two locations: at the point of the package where the wipe is removed (as stated in 2405.3 of the proposed rule) and on

the panel that faces outward on the shelf, so that the consumer can see the logo on the shelf without touching the package. These two locations are both specified in the INDA 2nd Edition COP.

NACWA also supports making mandatory the text warning proposed by DOEE in Section 2405.1. This type of warning is optional in the INDA COP and does not appear to be utilized by any manufacturer.

Thank you for your consideration of these comments. Please contact me at 202-533-1836 or cfinley@nacwa.org if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Cynthia A. Finley". The signature is written in a cursive, flowing style.

Cynthia A. Finley, Ph.D.
Director, Regulatory Affairs