

Date of Hearing: April 9, 2019

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 1672 (Bloom) – As Amended March 28, 2019

SUBJECT: Solid waste: flushable products

SUMMARY: Establishes criteria for "flushability" for nonwoven disposable products and requires non-flushable labels on nonwoven disposable products that do not meet those flushable criteria. Specifically, **this bill:**

- 1) States the intent of the Legislature to provide clear direction to manufacturers by setting performance requirements for nonwoven disposable products that are marketed for disposal to the sanitary sewer system.
- 2) Defines "covered entity" as the manufacturer of a covered product that is sold in this state or brought into the state for sale. Excludes a wholesaler, supplier, or retailer that is not responsible for the labeling or packaging of a covered product.
- 3) Defines a "covered product" as a nonwoven disposable product that is sold in this state or brought into the state for sale, and that is constructed from nonwoven sheets, including moist toilet tissue or cloth, that is designed, marketed, or commonly used for personal hygiene or cleaning purposes, including, but not limited to, diaper wipes, toilet wipes, household cleaning wipes, personal care wipes, and facial wipes.
- 4) Defines "enforcing agency" as the California Environmental Protection Agency (CalEPA).
- 5) Defines "flushable wipe" as a nonwoven disposable product that meets the performance standards set forth in the performance standards.
- 6) Defines "labeling requirements" as the labeling standards contained in the Code of Practice of the Association of the Nonwoven Fabrics Industry and the European Disposables and Nonwovens Association, titled Communicating Appropriate Disposal Pathways for Nonwoven Wipes to Protect Wastewater Systems, second edition, as published in April 2017.
- 7) Defines "nonflushable wipe" as a nonwoven disposable product that does not meet the performance standards set forth in the performance standards.
- 8) Defines "performance standards" as the International Water Services Flushability Group testing methods and criteria for flushability, as published in June 2018, as set forth in publicly available specification (PAS) documents 1, 2, and 3, and as summarized in chapters 6 and 7 of PAS document 1.
- 9) Prohibits, on and after January 1, 2020, a covered entity from labeling a covered product as safe to flush, safe for sewer systems, or safe for septic systems, unless the product is a flushable wipe.

- 10) Prohibits, unless a product is a flushable wipe, a covered entity from making, in any manner, any of the following representations regarding a covered product:
 - a) The product can be flushed;
 - b) The product is safe for sewer systems;
 - c) The product is safe for septic systems;
 - d) The product breaks apart shortly after flushing;
 - e) The product will not clog household plumbing systems;
 - f) The product will not clog household septic systems;
 - g) The product is safe for plumbing;
 - h) The product is safe to flush; or,
 - i) The product will dissolve or disperse in interaction with water.
- 11) Provides that representations include, among other things, product names, labels, endorsements, depictions, illustrations, trademarks, and trade names.
- 12) Requires, on and after January 1, 2020, a covered product that does not meet the performance standards to be labeled clearly and conspicuously in adherence with the labeling requirements to communicate that it should not be flushed. Requires the label to be in a high contrast font and color respective to the surrounding wording and space on the packaging and in a location that is visible when individual wipes are dispensed from the product packaging.
- 13) Requires, for products sold in bulk at retail, both the package purchased in the store and the individual packages contained within, to comply with the labeling requirements.
- 14) Prohibits a covered entity, directly or through any corporation, partnership, subsidiary, division, trade name, or association in connection to the manufacturing, labeling, packaging, advertising, promotion, offering for sale, sale, or distribution of a covered product, from making any representation, in any manner, expressly or by implication, including through the use of a product name, endorsement, depiction, illustration, trademark, or trade name, about the flushable attributes, benefits, performance, or efficacy of a nonflushable wipe.
- 15) Requires, on and after January 1, 2020, a covered entity to test and maintain self-certification records that verify that its covered products meet the performance standards and comply with the labeling requirements.
- 16) Requires the records demonstrating a flushable wipe's compliance with the performance standards to be made available by the covered entity upon request of the enforcing agency, free of charge, within 30 days of the request.

- 17) Requires verification of a nonflushable wipe's compliance with the labeling requirements to be made available by the covered entity upon request of the enforcing agency, free of charge, within 30 days of the request.
- 18) Requires a covered entity that does not properly label flushable wipes or nonflushable wipes that will be sold in California, or are reasonably expected to be sold in California, to be issued a notice of violation by the enforcing agency, providing 30 days for the noncompliant products to be recalled. Provides that the covered entity may be subject to an administrative penalty every day thereafter that those products remain available for purchase at retail or otherwise are distributed in the state.
- 19) Requires the enforcing agency, in issuing an administrative penalty, to take into consideration the nature, circumstances, extent, and gravity of the violation, the violator's past and present efforts to prevent, abate, or clean up conditions posing a threat to the public health or safety or the environment, the violator's ability to pay the proposed penalty, and the effect that the proposed penalty would have on the violator and the community as a whole.
- 20) Restricts the penalty imposed under this subdivision from exceeding five hundred dollars (\$500) per day.
- 21) Requires penalties collected to be deposited into the Flushable Wipes Fund, which is hereby created. Requires moneys in the fund to be subject to appropriation by the Legislature for purposes of enforcing this part.
- 22) Provides that a covered entity that violates or threatens to violate this part may be enjoined by the Attorney General in any court of competent jurisdiction, and civil penalties may be assessed and recovered in a civil action brought in any court of competent jurisdiction in an amount not to exceed two thousand five hundred dollars (\$2,500) for each violation.
- 23) Requires moneys collected by the Attorney General to be deposited into the Unfair Competition Law Fund.
- 24) Provides that to the extent that there is an inconsistency between this bill and a local standard or an updated performance standard that imposes greater restrictions, the greater restrictions shall prevail.
- 25) Provides that the provisions of this part are severable. Provides that if any provision of this part or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

EXISTING LAW:

Under federal guidelines:

- 1) Defines biodegradability and requires environmental marketing claims and claims of degradability, biodegradability, and photodegradability be qualified to the extent necessary to avoid consumer deception about the product or package's ability to degrade in the environment where it is customarily disposed and the rate and extent of degradation. (Federal Trade Commission (FTC), Green Guide Part 260 § 260.8)

- 2) Regulates the labeling requirements on various consumer products and requires any person who represents in advertising or on the label or container of a consumer good that the product is not harmful to, or is beneficial to, the natural environment, through the use of terms such as "environmental choice," "ecologically friendly," "earth friendly," "environmentally friendly," "ecologically sound," "environmentally sound," "environmentally safe," "ecologically safe," "environmentally lite," "green product," or any other like term, to maintain in written form in its records specified information and documentation supporting the validity of the representation. (FTC, Green Guide Part 260 § 260.4)

Under state law:

- 1) States that it is the public policy of the state that environmental marketing claims, whether explicit or implied, should be substantiated by competent and reliable evidence to prevent deceiving or misleading consumers about the environmental impact of plastic products. Provides that for consumers to have accurate and useful information about the environmental impact of plastic products, environmental marketing claims should adhere to uniform and recognized standards, including those standard specifications established by the American Society for Testing and Materials. (Public Resources Code § 42355.5)
- 2) Provides that it is unlawful for a person to make any untruthful, deceptive, or misleading environmental marketing claim, whether explicit or implied. (Business and Professions Code (BCP) § 17580.5 (a))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "When wet wipes products are flushed into the sewer system they can cause significant issues for private property owners, sewer collection systems, and wastewater treatment plants. Wet products that do not break down can catch on tree roots or other obstructions in residential sewer laterals and cause costly and dangerous backups for property owners. Wet wipes have been shown to cause significant damage to residential septic systems, resulting in expensive repairs and remediation for homeowners.

AB 1672 presents a straightforward solution to helping combat the aforementioned problems caused by improperly flushing wet wipes. The bill prescribes clear and consistent consumer messaging for these products that indicates to consumers that either a wipe is 'flushable,' or it is not. Under the provisions of AB 1672, wipes can be labeled as 'flushable' if they do not cause harm to the sewer system, meaning that manufacturers can demonstrate that their wipes break down in the sewer system like dry toilet paper. For all other wipes that are not intended to be flushed, they must be conspicuously marked with 'Do Not Flush' labeling."

What does it mean to be "flushable"? Generally, toilet paper is universally considered flushable due to the nature of its use as well as the design of the product to disperse upon being flushed. However, there currently is no federal or state definition of what constitutes a "flushable" consumer product.

As a result, companies have used their own definitions and methods to determine the flushability of their products. For consumers and wastewater agencies, this means there has been no single

reference from which to assess the flushability of a product other than the marketing claim on a package.

Flushable products: This lack of standardization, or regulation, has led to consumer confusion and lack of clarity in the market place as to the appropriateness of disposing certain products via plumbing systems.

In the 1980s, wipes advertised as "flushable" first appeared on the market. Since then, two types of flushable wipes have been designed and introduced: dispersible and low-strength wipes. Low-strength has been one approach to making nonwovens with permanent bonds flushable. These wipes collapse in a toilet, presenting a very small profile and the flexibility to travel through pipes unencumbered. However, their low wet strength makes them poor performers in most cleaning jobs. The second type of flushable wipe is dispersible. These products perform like a standard wipe as far as strength and softness, but in a toilet disperse into individual fibers or small groups of fibers.

More and more, an increasingly diverse range of disposable products has become available for consumer use. The growth of the market for such products is evidence of their popularity with the public, but their increased use brings with it discussion about their disposal, especially the topic of flushability.

For disposable products that address public health and hygiene considerations, consumers often mistakenly use the wastewater system as a preferred means of disposal. These products include disinfectant wipes and baby wipes (which are often confused with "flushable" wipes), feminine hygiene products, diapers, diaper liners, dog poop bags, wash cloths, condoms, and more. While consumer behavior cannot be legislated, legislation can steer manufacturing and labeling in a direction that better informs consumers how to behave. In the case of this bill, the intent is to better inform wipes intended for flushing and provide clarification to consumers on wipes not suitable for flushing.

Problems with nonflushable products: Products that are poorly designed or not at all intended to be flushed down the toilet can cause sewer blockages, which damage sewer lines and can lead to costly sanitary sewer overflows. Damage and overflows present dangers to public health and the environment.

A buildup of nonflushable products has been shown to cause clogs in sewage pumps, lead to entanglements in sewage treatment equipment, lead to sewer backups in residences, and increase the risk of a sanitary sewer overflow during a storm.

Wipes weave together and form large "rags" that can become massive obstructions in sewer lines when they combine with other improperly flushed items and fats, oils, and greases. These obstructions are commonly referred to as "fatburgs," and in addition to being a disgusting environmental problem, local agencies spend significant time and resources to remediate them. In the worst cases, fatburgs attributed to wipes contribute to sanitary sewer overflows, which are a threat to public health and the environment, and result in fines and penalties to public agencies.

The increased maintenance needed to prevent problems from nonflushable products is very costly to public wastewater agencies. Many of the sanitation agencies are finding wipes are the main culprit of the problem. In some cities, such as Petaluma, costly screening facilities have failed to stop these indispersible products from finding their way through the wastewater system.

In 2011, the Orange County Sanitation District (OCSD) conducted nearly 1,000 preventative or corrective de-ragging maintenance calls on 10 of their 15 regional pump stations. Total labor cost was more than \$300,000. OCSD continues to spend labor hours to avoid clogging that could lead to a sewer spill. Their crews routinely remove non-dispersables from their three hardest hit stations every Monday and Thursday. On August 13, 2012, the equivalent of 40 large trash bags on non-dispersable materials overburdened their new headworks and completely plugged three new washer compactors. It took six to eight hours and up to 10 plant employees to restore normal operations. The OCSD notes that operations and maintenance costs are going up. Spending more public agency money to reengineer the problem away by installing new machinery is not a sustainable solution.

The City of Camarillo's Waste Water Treatment Plant has invested approximately \$500,000 to upgrade its waste water treatment plant pump systems to manage the volume of wipes passing through the system on a daily basis.

California Sanitary Sewer Overflow database: The State Water Resources Control Board (State Water Board) considers a sanitary sewer overflow (SSO) as any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. SSOs pollute surface and ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.

According to the State Water Board's data on SSOs, 70% - 75% of the known causes and trends related to the causes of SSOs across the state tend to be tree roots, grease, fats, oils, and general debris. Even if wipes constitute less than 25% of the cause of SSOs, they still remain a disruption and a growing cost to local sanitation agencies to manage.

Plumbing standards: Minimum standards exist for the construction of building drainage pipe systems; these include allowable pipe diameters and slopes, venting requirements, and piping materials. Increasingly, smaller diameter pipes are being installed in new buildings. The passage of solid materials through these systems is dependent on the water being able to move the product. In 1995, the National Energy Policy Act (House Resolution 776) mandated that all new toilets must flush with no more than 1.6 gallons of water. If a flushable product can pass through a low-consumption toilet after one flush, there is a strong likelihood that product could pass through a stronger toilet system.

Establishing a workable flushable standard for flushable wipes: While there is not yet a regulatory standard for what is allowable to be flushed, there are both industry and water association standards that have used rigorous testing and engineering assessments to define "flushability."

INDA Guidance Document: After years of work, involving some 40 companies, in 2008, INDA and EDANA, the trade associations for non-woven fabrics supplied to the market across North America, Europe, the Middle East, and Africa, published the first edition of its Guidance Document, which contains guidelines to provide companies with a comprehensive framework for testing products to determine their flushability.

The Guidance Document contains flow charts of key questions that need to be answered for each route a product could follow post-flushing. The questions are answered through a series of tests.

Acceptance criteria for each test and for each question either demonstrate compatibility with the disposal system or determine whether further testing would be required before flushability could be clearly established.

The framework in the Guidance Document was based heavily on recommendations in the report by the Water Environment Research Foundation (WERF) called "Protocols to Assess the Breakdown of Flushable Consumer Products." The end-result underwent trials accompanied by a rigorous peer review by U.S. and European experts in wastewater conveyance and treatment, engineers, and those from academia who study the issue.

The INDA guidelines have continued to evolve. As a result, the INDA guidelines have gone through multiple reviews and iterations and have evolved to one that requires all wipes to pass seven different tests in order to be marketed as flushable. The seven tests include: a slosh box disintegration test; household pump test; settling test; aerobic biodegradation test; anaerobic biodegradation test; and, a municipal sewage pump test.

The current version of INDA/EDANA's Guidance Document 4 (GD4) was released in May of 2018.

INDA's guidance, per GD4, requires a test system containing 2 liters of water in an oscillating slosh box in which a single nonwoven wipe is run for 60 minutes. Subsequently, the contents of the box are transferred to and then rinsed through a 12.5mm perforated plate sieve. The portions of the wipe retained on the sieve are recovered, dried, and analyzed. To pass the test as "flushable," the percent of the starting dry mass passing through the 12.5mm perforated plate sieve after 60 minutes must be greater than 60% for at least 80% of the individual replicates tested.

International Water Services Flushability Group (IWSFG): The IWSFG is an international group of water service providers, and the associations and organizations representing them, that developed criteria for items that can be flushed down the toilet worldwide. Members include the National Association of Water Agencies, California Association of Sanitation Agencies, Sanitation Districts of Los Angeles County, as well as the Japan Sewage Works Association, European Water Association, Israeli Water Association, and water associations from Belgium, France, Spain, the Czech Republic, Estonia, Canada, and many more.

The IWSFG's founding principles state that to prevent problems with sewers, pipe, and toilet blockages plus the human and environmental cost of sewer flooding and pollution, the organizations signing this statement below agree that "only the 3Ps – Pee, Poo, and toilet Paper – should be flushed." They also state that 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. The founding principles state that, "Key requirements for any standard include that the product: a) breaks into small pieces quickly; b) must not be buoyant; and, c) does not contain plastic or regenerated cellulose and only contains materials which will readily degrade in a range of natural environments."

The IWSFG developed the International Water Industry Statement on Flushability that was released on September 22, 2016, and signed by more than 250 water organizations. The 2018 IWSFG standards have five performance criteria, of which three utilize INDA standards. An additional criteria is based on Technical Association of the Pulp and Paper Industry

(TAPPI)/American National Standards Institute for testing whether there are plastics in the material, and then there is the fifth criteria, where the IWSFG standard deviates from INDA's: the slosh box test.

Under IWSFG's guidance, wipes are placed in a slosh box containing four liters of water, which are then rotated at 18rpm for 30 minutes. The box is then emptied onto a 25mm perforated sieve and the upper surface of the sieve is rinsed at a designated flow. Quantitative analysis of the retained contents on the sieve is assessed to see if the total pass through rate of 95% of the total initial dry mass is met.

While the IWSFG test requires 35% more disintegration, its slosh box test provides a sieve with perforations that are two times the size of the sieve called for by INDA, and the IWSFG allows for twice as much water than the industry's slosh box test parameters.

Flushability as determined by this bill: Under the IWSFG slosh box test performance standard, 95% of a wipe must disintegrate. In contrast, *prior* to 2018, the INDA standards for the slosh box test only required 25% of a wipe to break apart and disperse for it to be deemed "flushable," meaning 75% of the wipe could remain and it still be "flushable." Under the current GD 4 standard, up to 39% of the wipe can remain.

The California Association of Sanitation Agencies (CASA), which represents more than one hundred public agencies that engage in the collection, treatment or disposal of wastewater, resource recovery or water recycling, states that the IWSFG standard is more stringent and will result in fewer wipes adding to backups and clogs.

AB 1672, sponsored by CASA, would codify the ostensibly more stringent of the two standards - the IWSFG testing methods and criteria for flushability.

Non-flushable labeling: There are many kinds of wipes on the market: "flushable" wipes, disinfectant cleaning wipes, makeup remover wipes, personal hygiene wipes, and baby wipes, surely among others. The wipes currently sold as flushable are made of cotton. Many of the wipes on the market not intended by the manufacturer to be flushable (but often are flushed by consumers) are made of cotton and plastic materials to make the wipes more durable (such as cleaning wipes). Both "flushable" wipes and those not intended to be flushed can cause problems for sewer agencies. The flushability criteria in the bill will provide clarification to manufacturers of "flushable" wipes. To try to address some of the consumer confusion, AB 1672 requires any product that does not meet the bill's flushability criteria to be clearly labeled that is it not flushable per INDA's labeling requirements. INDA's Code of Practice includes a "Do Not Flush" symbol for companies to use on product packaging.



Enforcement: The bill designates CalEPA as the enforcing agency to issue violations and administrative penalties to manufacturers not in compliance with the provisions of the bill.

CalEPA is not a regulatory agency, and enforcing manufacturer compliance standards is not that state entity's normal purview.

Other state laws that determine manufacturing standards leave enforcement up to the Attorney General and local district attorneys. It may be more appropriate to remove the provisions of the bill from CalEPA and provide enforcement by the Attorney General.

Arguments in support: According to the CASA, the sponsor of the bill, "When wet wipes products are flushed into the sewer system they can cause significant issues for private property owners, sewer collection systems, and wastewater treatment plants. Wet wipes products that do not break down can catch on tree roots or other obstructions in residential sewer laterals and cause costly and dangerous backups for property owners. Wet wipes have also been shown to cause significant damage to residential septic systems, resulting in expensive repairs and remediation for homeowners ... AB 1672 presents a straightforward solution to helping combat the problems caused by improperly flushing wet wipes. The bill prescribes clear and consistent consumer messaging for these products that indicates to consumers that either a wipe is 'flushable,' or it is not. Under the provisions of AB 1672, wipes can be labeled as 'flushable' if they do not cause harm to the sewer system, meaning that manufacturers can demonstrate that their wipes break down in the sewer system like dry toilet paper. For all other wipes that are not intended to be flushed, they must be conspicuously marked with 'Do Not Flush' labeling."

Arguments in opposition: According to INDA, "Data from California State Water Resources Control Board Sanitary Sewer Overflow (SSO) Reduction program illustrates that the INDA/EDANA flushability standards are working well as it reflects wipes products are not the cause of overflows and clogs ... AB 1672 (Bloom) seeks to codify the flushability specification created by an informal group of wastewater associations called the International Water Services Flushability Group (IWSFG). Their specification is overreaching in that IWSFG's PAS3 test fails not only all flushable wipes on the market but some toilet paper as well. Unless wastewater experts have decided that their collection systems can no longer handle toilet paper, the necessity for a flushability test so stringent that fails to pass toilet paper is highly questionable."

Committee amendments: The committee may wish to amend the bill as follows:

- 1) Remove the bill from the jurisdiction of CalEPA and instead leave enforcement up to the Attorney General, district attorneys, and city prosecutors.
- 2) Delete Section 49652 (f) from the bill to prevent a local standard from superseding the state standard that this bill intends to create.

Double referral: Should this bill be approved by the Assembly Environmental Safety & Toxic Materials Committee, it will be re-referred to the Assembly Judiciary Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

CALIFORNIA ASSOCIATION OF SANITATION AGENCIES (SPONSOR)
 CALIFORNIA PRODUCT STEWARDSHIP COUNCIL
 CENTRAL CONTRA COSTA SANITARY DISTRICT
 CITY OF BURLINGAME

CITY OF CAMARILLO
EASTERN MUNICIPAL WATER DISTRICT
GOLETA WEST SANITARY DISTRICT
LAS GALLINAS VALLEY SANITARY DISTRICT
LAS VIRGENES MUNICIPAL WATER DISTRICT
NATIONAL STEWARDSHIP ACTION COUNCIL
ORANGE COUNTY SANITATION DISTRICT
SACRAMENTO AREA SEWER DISTRICT
SACRAMENTO COUNTY REGIONAL SANITATION DISTRICT (REGIONAL SAN)
SANITATION DISTRICTS OF LOS ANGELES COUNTY
UNION SANITARY DISTRICT

Opposition

AMERICAN FOREST & PAPER ASSOCIATION
CALIFORNIA CHAMBER OF COMMERCE (CALCHAMBER)
CALIFORNIA MANUFACTURES & TECHNOLOGY ASSOCIATION
CONSUMER HEALTHCARE PRODUCTS ASSOCIATION
GROCERY MANUFACTURERS ASSOCIATION
HOUSEHOLD AND COMMERCIAL PRODUCTS ASSOCIATION
INDA, ASSOCIATION OF THE NON-WOVEN FABRICS INDUSTRY
PERSONAL CARE PRODUCTS COUNCIL

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