

NACWA Pretreatment Workshop

**Some of These Things Do Not Belong
... What Else Gets “Flushed.”**

**Disposable Wipes
The WEF CSC Initiative**

***Rob Villee,
WEF CSC Chair***



Acknowledgements

- Nick Arhontes - OCSD
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- Aubrey Strause – MWWCA
- Tom Connolly – Yarmouth ME
- Steve Ogle - INDA
- David Powling – Kimberly Clark
- Gayle Rece – Proctor and Gamble

Terminology

- **INDA** -- is a Trade Organization that represents the Non-woven fabrics industry
- **Flushability Guidelines** -- Voluntary Certification promulgated by INDA that the non-woven substrate will breakdown in a certain timeframe
- **MWWCA** -- Maine WasteWater Control Association
- **JETCC** -- Joint Environmental Training Coordinating Committee

Background

- This started out as a “Flushable Wipes” project
- Proposed Legislation = INDA response
 - California, New Jersey, and Maine
- We spend BIG \$\$ to eliminate problems

Flushable Wipes... maybe not the issue

Portland Maine Field Study #1



PHOTO COURTESY OF JETCC



Portland Maine Field Study #1



PHOTO COURTESY OF JETCC

STOPPER

the unflushable

What's the Problem?

“Disposable” vs. “Flushable”

Slide Courtesy of JETCC



It depends who you ask!

- Manufacturers say: “Products not designed to be flushed are in some cases being flushed due to lack of *consumer education*” (INDA)
- Consumers say: “There is confusion about what is ‘*disposable*’ as compared to what is ‘*flushable*’.”
- Equipment companies say: “There’s no problem- you just need an *upgrade*!”

the solution will be a combination of efforts.

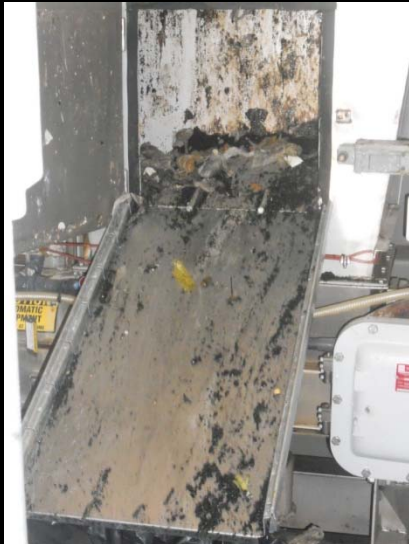
Flushable Wipes Field Study

- INDAA
 - Kimberly Clark
 - Proctor and Gamble
- WEF CSC
- Maine Wastewater
- City of Portland

Give me a great big Kiss



The Process



Paper Products – 42%



Baby Wipes – 24%



Feminine Hygiene Products – 17%



Flushable – 8%



Others Products

- Household Wipes – 4%
- Cosmetic – 3%
- Medical – 2%
- Hands, Face & Body (HFB) – 1%

Result Summary

- 90% +/- of the products removed from the sewer during the test are non-flushable
- The “Flushable Products” do not have a lot of structural strength and tear easily
- Paper, specifically paper towels from public restroom dispensers, is a major issue
- Baby Wipes are indestructible squares of plastic

Baby Wipes

- they are clearly labeled “do not flush” (At least according to INDA)
- Flushable substrates are more expensive – so requiring them isn’t going to happen – at least not voluntarily
- \$\$ are going to drive the purchasing decisions at the store – “*flushability guideline*” compliant wipes are twice the cost of baby wipes

Green Public Restrooms

- Remove the paper towels
- Provide disposal systems for feminine hygiene products, wipes, etc.



Re-defining the Problem

- Disposable Products that are Flushable, but not Dispersible are the problem
- Modern toilets will flush just about anything
- Lack of consistent labeling and how the disposable/flushable products are displayed on store shelves leads to consumer confusion

We are going to clog a pump... on purpose!!

Portland Maine Field Study #2



PHOTO COURTESY OF JETCC



DSCN0714 01102012 All mounds

Maine Part Dux

- The pumps didn't clog.... So we spent a lot of time talking
- INDA does not have a budget for this
- Our definition of flushable (it goes down the toilet) is different than INDA's (it meets the Flushability Guidelines)
- We have an MAJOR difference of opinion on "Non-Flushable Labeling"

Non-flushable Labeling...



- **Flushability** -- It is important that non-flushable products be labeled "No Flush". A clear communication on packaging will educate consumers and prevent problems at waste water treatment facilities.



Non-flushable Labeling...



WIPIES LINGETTES TOALLITAS

HUGGIES

Natural Care

GENTLE INGREDIENTS / INGRÉDIENTS DOUX / INGREDIENTES SUAVES:
 Water/Eau/Aqua, Potassium Laureth Phosphate, Glycerin, Polysorbate 20, Tetrasodium EDTA, Methylparaben, Malic Acid, Methylisothiazolinone, Aloe Barbadensis Leaf Extract, Tocopheryl Acetate. (Vitamin E is in the form of Tocopheryl Acetate. / La vitamine E est présente sous forme d'acétate de tocophérol. / La vitamina E está en forma de acetato de tocoferil.)

Keep lid or seal tightly closed. Store at room temperature. / Maintenir le couvercle ou le sceau bien fermé. Conserver à la température de la pièce. / Mantenga la tapa o el sello bien cerrada. Guarde a temperatura ambiente.

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CAUTION: To avoid risk of choking and suffocation, keep wipes, plastic bags and plastic containers away from babies and children. Plastic containers may break resulting in small pieces and sharp edges. Plastic containers and plastic bags are not intended for use by children. / **ATTENTION:** Pour éviter tout risque de suffocation, tenir les lingettes, les sacs et les contenants en plastique hors de la portée des bébés et des jeunes enfants. Les contenants en plastique peuvent se briser et alors comporter de petits morceaux et des bords tranchants. Les contenants et les sacs en plastique ne sont pas conçus pour être utilisés par des enfants. / **PRECAUCIÓN:** Para evitar el riesgo de ahogo y sofocación, mantenga las toallitas, las bolsas de plástico y los contenedores de plástico fuera del alcance de los bebés y niños. Los contenedores de plástico pueden romperse resultando en pedazos pequeños y bordes afilados. Los contenedores y las bolsas de plástico no son para uso de los niños.

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REALLY????



HUGGIES
Natural Care

WIRES LINGETTES TOALLITAS

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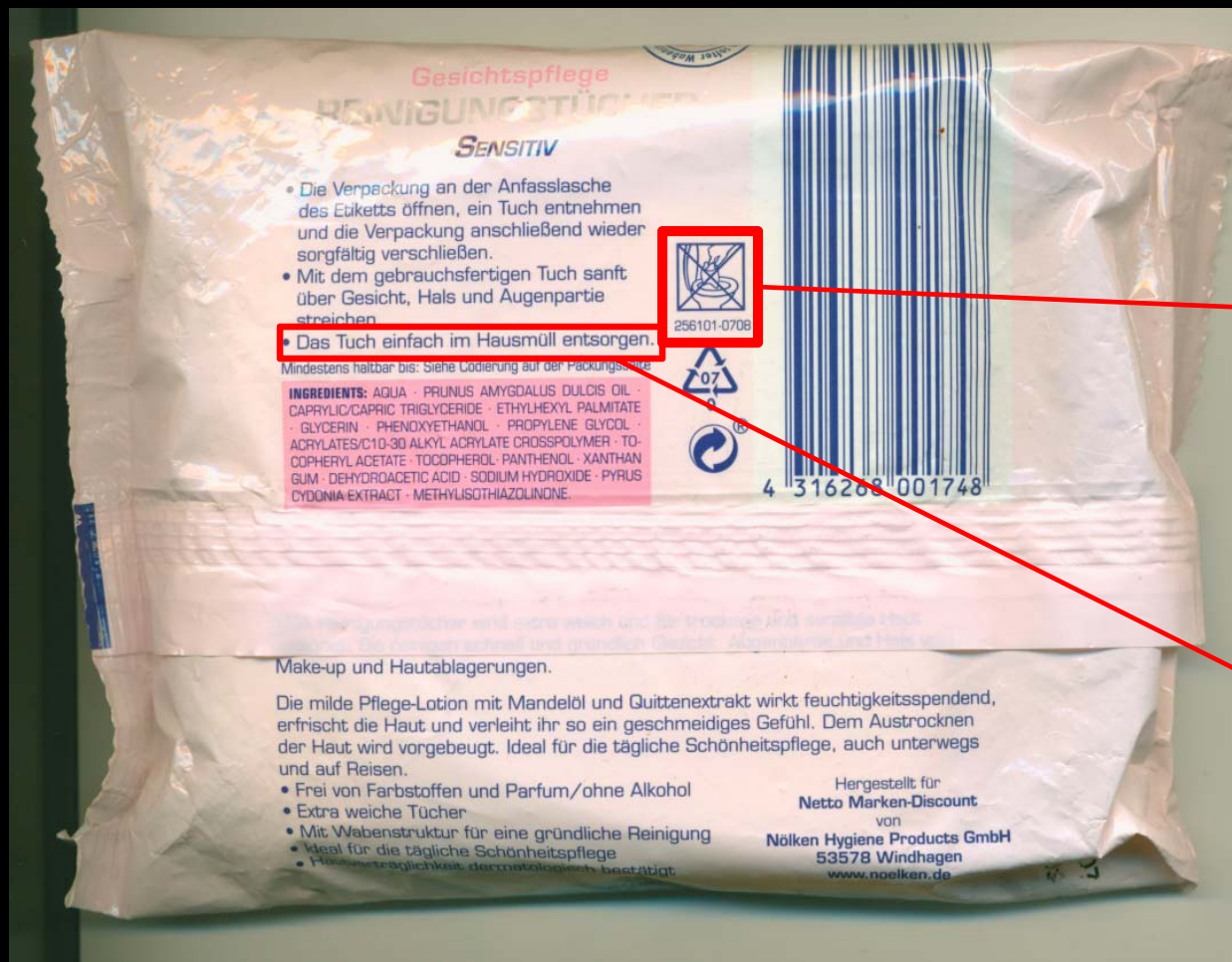
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European Labeling



**Simply dispose
of the wipe in the
trash.**

What we are looking for..



What's happening now

- The Maine Legislature has tabled the Bill but has required INDA continue working with MWWCA
- Focus Groups and Consumer Education are key components
- Timeline = 2012 thru early 2013
- Hospital Maternity Wards give out Baby Wipes to new Parents – to be included in the study

What's happening now

- **Going Global – Denmark, Sweden, Netherlands and the UK are all working on this.**
- **WERF Targeted Collaborative Research Project (TCR) – Consumer Education**
- **Independent 3rd Party testing of “flushable products” -- (Flushability Guidelines)**

What's happening now

- Met with INDA in New Orleans
- They want this to go away
- They will recommend moving the Non-Flushable label to a more prominent location on the package
- They will work with retailers to separate the Toddler Wipes (flushable) from the Baby Wipes (non-flushable)

What's happening now

- WEF House of Delegates is forming a workgroup to address this
- They will focus on:
 - Green Public Restroom Design
 - Model Legislation
- Some Public Education

<http://youtu.be/SLTVqkXVvNk>

Message: Keep it Simple

**If it is not toilet paper,
it shouldn't be flushed!**



A message from the
Portland Water District



SLIDE COURTESY OF JETCC

Message: Keep it Simple

From Minnetonka, MN:

**“Remember this easy reminder:
if it’s not toilet paper, and if you
didn’t eat it or drink it first, it
shouldn’t go in the toilet.”**

SLIDE COURTESY OF JETCC

Message: Keep it Simple



It's simple, the toilet is
only meant to flush
the three P's—
pee, poop and paper.

Orange County (CA) Sanitation District

It's a Toilet, Not a Trashcan!

Bill Inserts

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Some Things Just Don't Belong in the Toilet...

Toilets are only meant for one activity, and you know what we're talking about! When the wrong thing is flushed, results can include costly backups on your own property or problems at your local wastewater treatment plant. That's why it's so important to treat toilets properly and flush only your personal contributions to the local wastewater treatment plant.

Don't rush to flush any items like:

- Baby wipes and diapers
- Rags and towels
- Cotton swabs
- Syringes
- Candy and other food wrappers
- Clothing labels
- Cleaning sponges
- Toys
- Plastic items of any description
- Aquarium gravel or kitty litter
- Rubber items such as latex gloves
- Cigarette butts
- Sanitary napkins
- Hair
- Underwear
- Disposable toilet brushes



Sewer Overflows Are a Mess— Disposable Does Not Mean Flushable!

It will take a lot more than the paper towels that caused this mess to clean it up. Flushing paper towels and other garbage down the toilet wastes water and can create sewer backups and overflows. This can also cause time-consuming backups in the public sewer pipes and at the local wastewater treatment plant, and related costs can be passed on to ratepayers. Even if its label reads "flushable," you are still safer and more environmentally correct to place the item in a trashcan. And because homeowners are responsible for their property's sewer pipes, improper flushing can cost you money. **You plug it, you pay for it!**

And There's More...

Whatever ends up in your toilet can potentially impact the water environment, so it's really important to keep household wastes such as window cleaners, unused or expired pharmaceutical products, paint thinners, fats, and fruit labels out of toilets and drains and dispose of them properly. For more information, visit <http://www.wef.org/HouseholdWaste>.

SLIDE COURTESY OF JETCC

San Francisco Public Utilities Commission

Toilets Are **Not** Trashcans!



Did you know that flushing wipes down the toilet can cause problems in the City's sewer system?

Even wipes (such as sanitary wipes, household cleaning wipes, baby wipes, etc.) that are labeled "flushable" clog the sewer system, contributing to costly cleanups. The San Francisco Public Utilities Commission (SFPUC) encourages everyone to flush only human waste and toilet paper down the toilet. Please throw wipes and similar items in the trash.

Remember, the bay and ocean are closer than you think!



<http://pollutionprevention.sfwater.org>

SLIDE COURTESY OF JETCC

Message:
Keep it
Simple

SLIDE COURTESY OF JETCC



POLLUTION SOLUTION

Disposable **WIPES**

Minimize use of disposable wipes.

Discard used wipes in the trash.

Do Flush



- ◉ Toilet Paper
- ◉ Human Waste
- ◉ Pet Waste

Don't Flush



- ◉ Disposable Wipes
- ◉ Dental Floss
- ◉ Paper Towels
- ◉ Feminine Products
- ◉ Cotton Balls
- ◉ Bandages
- ◉ Syringes or Needles
- ◉ Gum



Portland Water District

225 Douglas Street | PO Box 3553
Portland, Maine 04103

207.781.8311 | customerservices@pwd.org | www.pwd.org
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Pump Clogging: An SOP for Troubleshooting Your System



PRESENTED AT THE
MWWCA SPRING CONFERENCE
ORONO, ME

APRIL 27, 2012

SCOTT FIRMIN (PORTLAND WATER DISTRICT)
AUBREY STRAUSE (TATA & HOWARD)

SOP Data Entry Form

Maine WasteWater Control Association
Data Entry Form
SOP for Evaluating Materials in Pump Clogs and Sewer Obstructions

Municipality: _____

Location: _____

Nature of interference (pump clog, sewer obstruction, other): _____

Date: _____ Weather Conditions: _____

Operator(s): _____

Separate material into even sized piles for comparison. For instance, there may one pile of cleaning wipes and 2 and 1/2 piles of paper towels.

Rinsing materials in a bucket prior to screening may make it easier to separate and identify individual materials.

Material	# of Piles	% of Total (# Piles / Total # Piles)	Tear (Yes or No)	Description
Paper Towels				C-fold towels or serrated edge.
Cleaning or Other Large Wipes (8-12" on longest side)				Often have a perforated or serrated edge. Include shop towels, medical wipes, and "Swiffer" type pads here.
Baby Wipes (Medium: 8" on longest side)				Include all embossed or imprinted wipes here.
Personal Wipes (Small: 2-8" on longest side)				Include makeup remover pads, hemorrhoid wipes, hand wipes.
Hygiene Products			N/A	Include tampons, tampon applicators, and sanitary pads as well as adult diapers.
Other:				Describe:
Total # Piles				

Describe anything that may have allowed material to collect around it (wire, plastic strapping, etc.): _____

If you are unable to separate materials, generally describe what you see (can it be torn readily): _____

Email completed forms to: sfirmin@pwd.org

WOW – World of Wipes Conference

■ Binder Technology for Wipes – The Challenges and the Successes

[Maureen Nunn](#), *Senior Technical Service Specialist, The Dow Chemical Company*

The wipes market can be classified as personal care wipes, household and cleaning wipes, and industrial cleaning wipes. In North America alone, the wipes market is projected to grow from \$4.5 billion in 2009 to \$5.5 billion in 2014. As wipe use has increased, the industry has been challenged to continually improve product sustainability. Sustainability has many aspects for the nonwovens producers. Ultra low formaldehyde content in finished product is one way to improved sustainability.

Alternatively another route to sustainability is to develop a truly dispersible or “flushable” wipe. This presentation will present ongoing progress on the development of ultra low formaldehyde binders for wipes and continued progress towards the development of dispersible binder technology.

Recycling

- **KnoWaste (UK)**--Absorbent hygiene products (AHP), including disposable nappies, adult incontinence and feminine hygiene products are to be recycled as part of a trial...
- **TerraCycle (US)** -- recycling disposable diapers, and feminine hygiene products into fence posts

Summary and Quiz

- Action on Multiple Fronts
- INDA will work as hard as necessary, but not harder
- Legislation in multiple states may be necessary
- Quiz

Flushable or Not?



Flushable or Not?



Flushable or Not?



Flushable or Not?



And thankfully for Tom, Not Dispersible