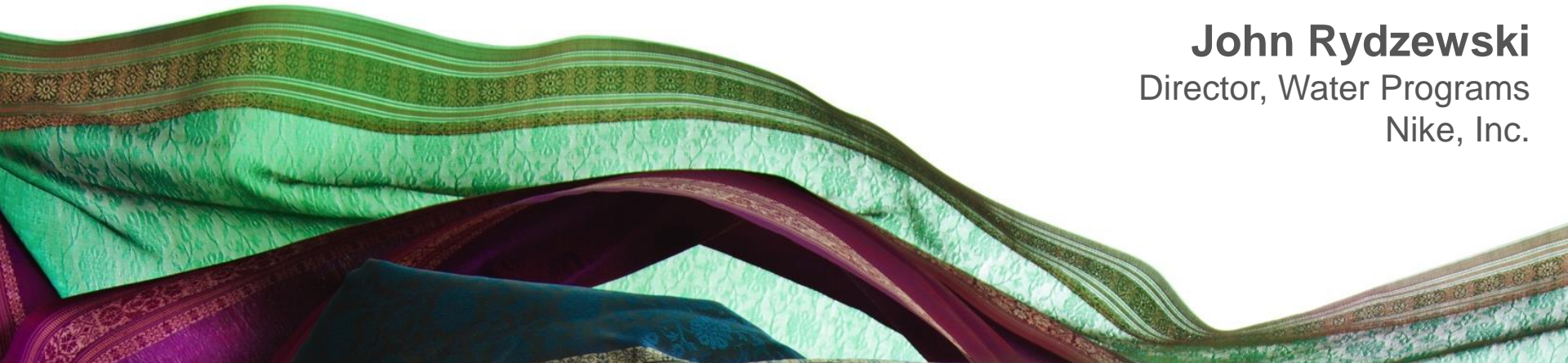


Ø ZDHC

Driving Industry Change: The ZDHC Wastewater Discharge Guidelines for the Footwear and Apparel Industry

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ZDHC: Holistic Approach to Chemical Management



ZDHC: Wastewater Challenges

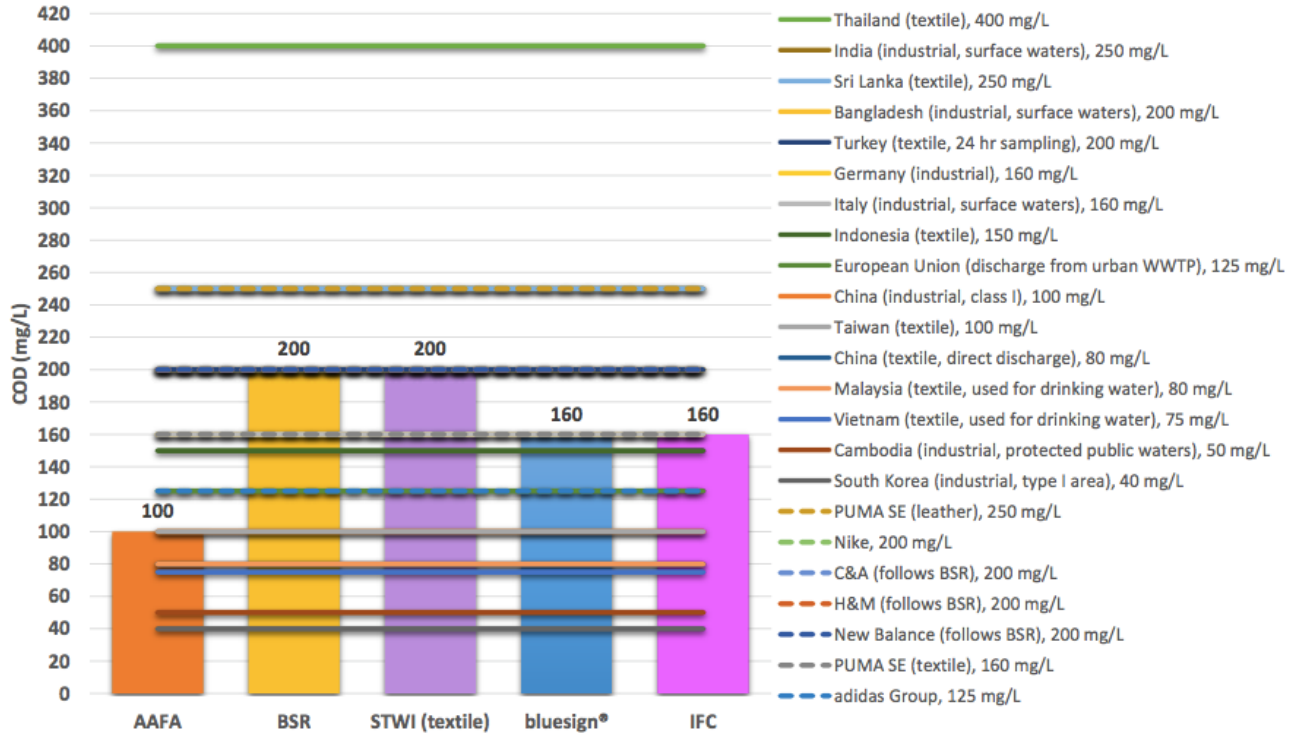
Current State

- Regulations vary greatly from nation to nation
- Different standards and testing frequency among brands; testing fatigue
- Weak coverage of the 11 priority chemical groups
- Confusion for suppliers which standards to apply

Future State

Industry alignment to a **uniform and global guidance** for wastewater discharge quality and testing frequency; one test good for all brands

ZDHC: Example of Current State (Chemical Oxygen Demand)



ZDHC: Wastewater Guidelines

Conventional Wastewater Parameters

- BOD, COD, TSS, pH, color, etc.
- Three level approach: foundational, advanced, aspirational
- Limit values drawn from 1,000+ test reports
- Differentiates between direct and indirect dischargers

ZDHC MRSL Parameters

- Carcinogenic, mutagenic, repro-toxic, very persistent
- First guideline to define pass/fail reporting limits via robust test methods
- Guideline intended to confirm “no intentional use”

Testing and Disclosure

- One test per ZDHC Wastewater Guideline is valid for all ZDHC Brands
- Centralized upload of test data to ZDHC website



ZDHC Wastewater Guidelines: Scope

In Scope

- Textile Dyeing and Finishing
- Fabric Mills
- Washing/Laundry facilities
- Printing Operations
- Vertical finished goods manufacturing and fiber production

Out of Scope

- Wastewater flows beyond property limits of facility
- Wastewater treatment systems not owned/operated by facility
- Centralized wastewater treatment facilities
- Cotton growing, cattle farming, slaughterhouses, chemical synthesis, polymer industry, leather tanneries

ZDHC Wastewater Guidelines: Schedule

Sampling Cadence

- April 30 and October 31 each year

Conventional Parameters (direct dischargers)

- Achieve Foundational Limits one year from first laboratory sample (due May 31, 2017)
- For facilities starting operations after January 1, 2018, achieve Progressive Limits
- Achieve Aspirational Limits by January 1, 2020

MRSL Parameters

- Pass on all reporting limits by January 1, 2020



ZDHC Wastewater Guidelines: Pilot

Objective

- Determine understanding of guideline across the value chain
- Lab capability (to comply to standard test method and accurately measure parameters)
- Data upload to the ZDHC Gateway Wastewater Module

Participants

- 25 facilities
- Fabric mills, dyeing and finishing, laundry and tannery

Preliminary Results

- Training necessary for brands, material manufacturers, and laboratories
- Clarify definition of “detection limit” and “reporting limit”
- Standardize and automate as much as possible
- Most challenging conventional parameters: COD, antimony, color, coliform, sulfite

ZDHC Wastewater Guideline: Current Status/Next Steps

One Test for All ZDHC Brands

- Increase supplier facility efficiency; two sets of analyses per year
- Brands align to a single set of expectations

Training

- ZDHC has developed a training package
- Brands training their value chains

Next Steps

- Set MRSL pass/fail limits for sludge; include tanneries into scope by end of 2017
- ZDHC developing lab qualification/certification criteria to ensure baseline data quality expectations
- Standardized reporting template; automated upload to ZDHC website
- Finalize and deploy the Wastewater Module for October 2017 testing deadline

Questions & Answers



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Building a Global Centre of Excellence in Responsible Chemical Management