

Linen, Uniform and Facility Services

Pioneers, Progressives in Sustainable Laundering

City of Los Angeles Sanitation – Green Laundry Webinar

February 15, 2023

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Linen, Uniform and Facility Services Industry

- Supplies, launders and maintains textiles for businesses, government, other organizations
- NAICS 812331 – Industrial laundries (uniform rental)
- NAICS 812332 – Linen suppliers (healthcare, foodservice, hospitality)

TRSA – Since 1912 (110+ Years)

- The industry's only U.S. advocacy group (with worldwide membership)
- Promotes economic and environmental benefits of reusable textiles
- Increases the industry's productivity, sustainability, safety and professionalism

TRSA Members

- 200+ linen, uniform and facility services companies operating 1,500+ facilities
- 120+ supplier partner companies serving these operators

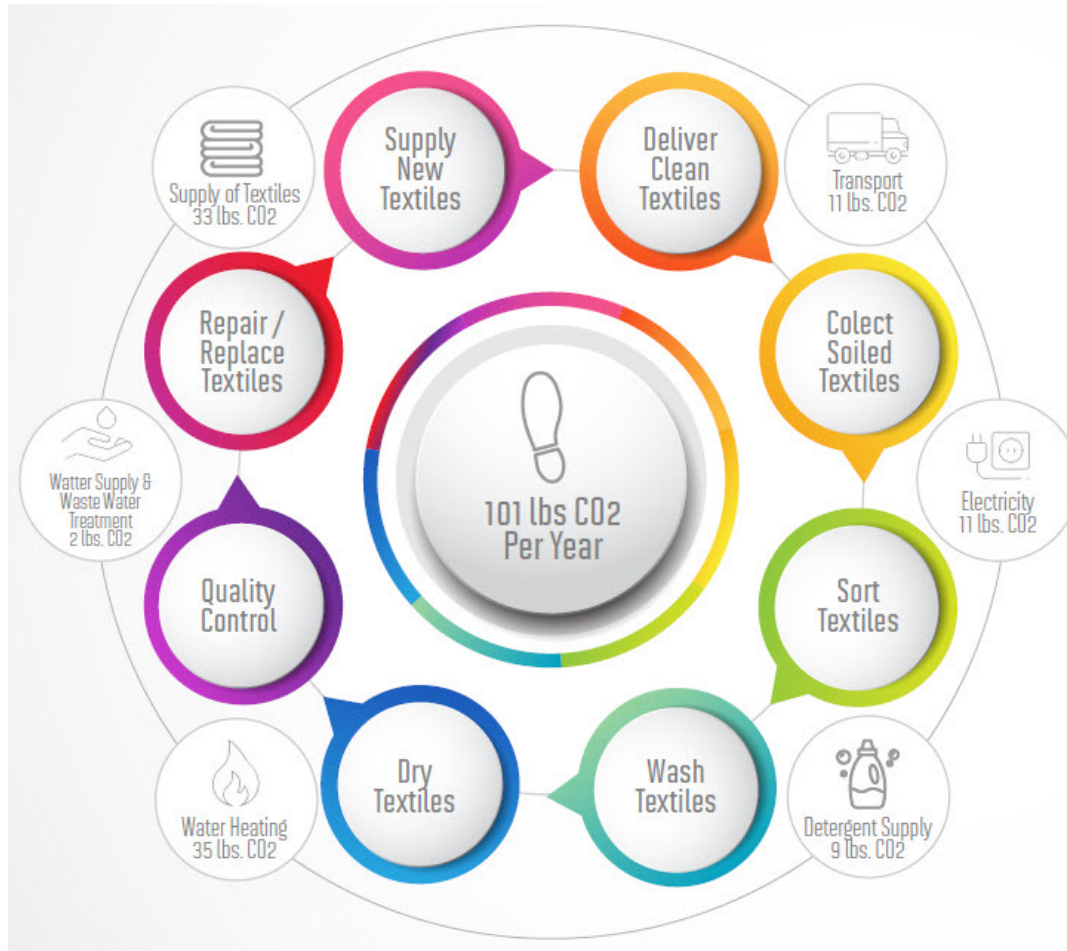
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Positive Economic/ Environmental Impacts of Linen, Uniform and Facility Services

Carbon Footprint: One Hotel Bed vs. 4 Consumer Activity Impacts



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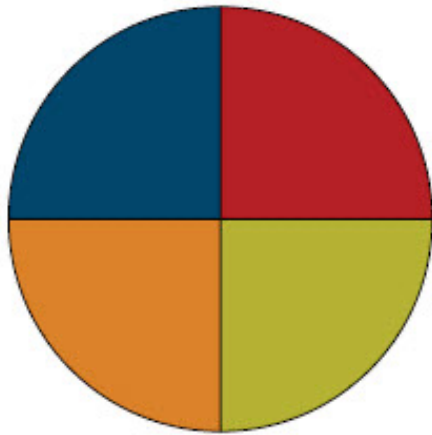
Laundry at Its Most Economical



- High-Capacity Machinery
- Resource Conservation
- Utility Savings

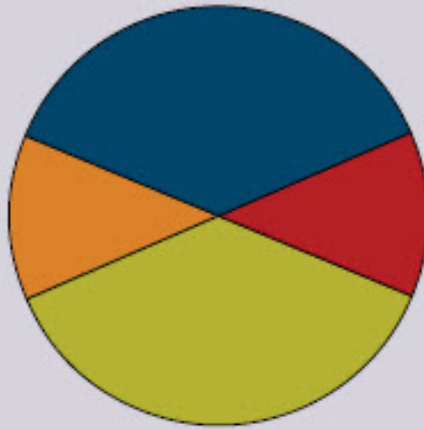
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Variable Wash Formulas



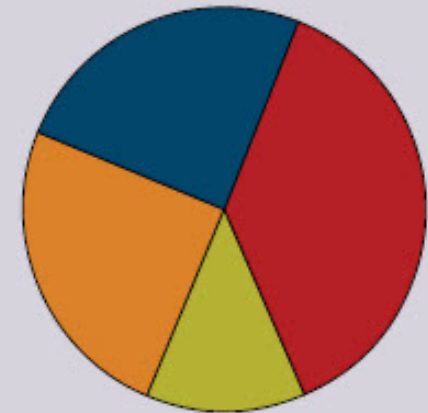
■ Mechanical Action ■ Temperature
■ Chemical Action ■ Time

Four Formula Factors



■ Mechanical Action ■ Temperature
■ Chemical Action ■ Time

Tunnel Washer



■ Mechanical Action ■ Temperature
■ Chemical Action ■ Time

Lower Temperature Formula

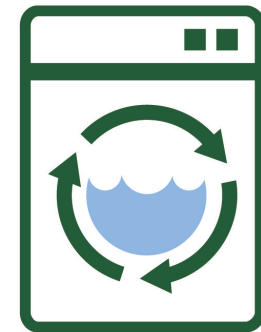
Certifying Linen & Uniform Operations Sustainability

Thresholds for water and energy use per pound

On-site inspection

Best practices: some are more heavily weighted

ASTM International Standard



CLEAN GREEN®

TRSA® Certified
Reusable Textile Industry

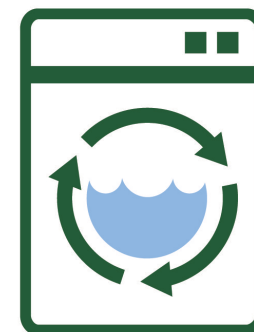
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Resource Recovery Required

- Boiler heat recovery
- Direct-fired hot water heater
- Energy audit
- Energy efficient lighting and/or skylights
- Fleet vehicle route optimization
- Low temperature detergents
- Nonylphenol ethoxylate (NPE) free detergent
- Preventative maintenance on boiler
- Preventive maintenance on water heater
- Wastewater heat recovery



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Certifying Hygiene from Laundry to Customer



Ensures environmentally sound processes clean and deliver textiles at appropriate cleanliness levels for various commercial uses

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Committed to Cleanliness Thresholds

All Certifications:

USP 62 – Absence of specified microorganisms

RODAC Plate Test – Yeast and mold of 20 cfu per square decimeter or lower

Healthcare:

RODAC – Total aerobic microbial count (TAMC) of 20 cfu or lower

Food Safety, Food Service, Hospitality

RODAC – TAMC of 50 cfu or lower

Must conduct HACCP hazard analysis



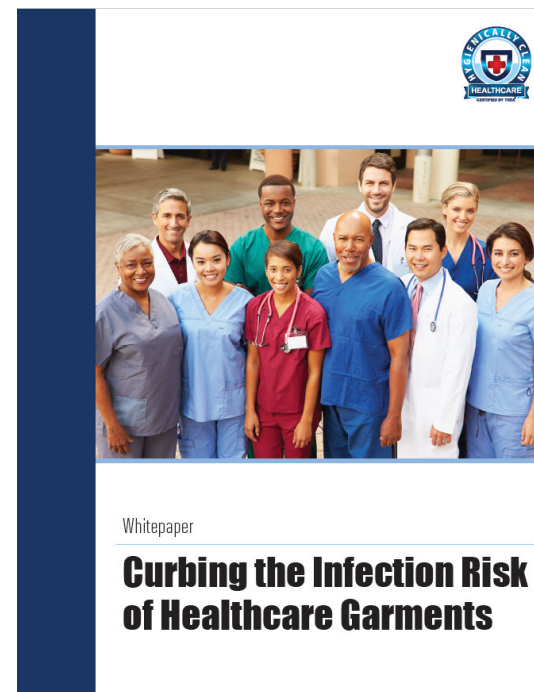
Better Hygiene than Home Washing

Linen and uniform service washing machines attain higher temperatures than home washers

Home washing more likely to use low water temperature

Uncertainty that employees who wash at home will follow prescribed instructions

Research finds bacterial contamination



Working with EPA to Self-Regulate, Curb Discharges to Sewers

Categorical Standards (Industrial Effluent Guidelines Program)

EPA proposed rules specifically for the industry's discharges and withdrew them – first time ever an industrial category was removed from this program

Safer Detergents Stewardship Initiative

TRSA received SDSI Champion status for actively encouraging the use of surfactants: compounds that break down quickly to non-polluting compounds and help protect aquatic life in both fresh and salt water.

Voluntary NPE Phase-Out

Without subjecting to regulation, TRSA members have almost eliminated nonylphenol ethoxylate surfactants (not a safer surfactant)



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EPA Safer Choice:

<https://www.epa.gov/saferchoice/products>

Two of the seven TRSA Supplier Partner members providing wash chemistry show results from this search

Possible product categories for laundry:

- Fabric softeners
- Laundry detergent boosters
- Laundry detergents
- Pre-treaters

Search Safer Choice-Certified Products

Product or Company Name (Optional)

Business ▼

Show only:

☐ [Fragrance-free products¹](#)

☐ [Products with outdoor uses²](#)

Product Type (Optional) ▼

TRSA on Microplastics and PFAS

Textile manufacturer liaison

Determining extent to which currently used products contain PFAS

Monitoring options for technology improvement/fabric variation to reduce microplastics

PFAS task force providing compliance-related information to laundry operators

Advocacy

TRSA California counsel monitoring microplastics legislation

- Three bills that would have targeted industrial launderers were withdrawn
- Bill reintroduced that would require filters in all washing machines

Building awareness of industry's minimal effluent compared with home laundry

Informing laundries

Presentations, webinar on consultants' sampling of PFAS content from laundry discharges

Connecting laundries to public, private resources forecasting how PFAS may be regulated

TRSA Contacts

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