Logistics

• Webinar will run approximately one hour.
• A recording of the webinar will be available online.
• Please take two minutes to complete the survey at the end.
Q&A Session

- Q&A will be held during the final 15 minutes.
- Ask questions through the “chat” in the lower right side of your screen.
About Healthy Schools Campaign
About Green Clean Schools
What is Green Cleaning? Our 5 Step Approach

1. Prepare Your School
2. Identify Green Cleaning Products
3. Introduce Green Equipment + Supplies
4. Adopt Green Cleaning Training + Procedures
5. Share the Responsibility
Today’s Panelists

• Ed Wierzbicki, Facilities Supervisor at Grand Valley State University
• Renae Hesselink, Vice President of Sustainability at Nichols
• Mike Steers, Nichols Equipment Sales
Leadership

- Associate Vice President - Tim Thimmesch
- Department Supervisors
  - Janet Aubil - Operations Supervisor
  - Ed Wierzbicki - Facilities Supervisor
  - Raven McClinon - Assistant Supervisor
  - Cathy Headley - Facilities Supervisor
The hard working men and women who dedicate themselves to a successful cleaning operation

- Kevin Alderink
- Dan Argemar
- Gene Bohner
- Diana Cable
- Glenn Coyell
- Terry Daniels
- Julio Duran
- Maria Gonzalez
- Steve Hutchens
- Kevin Johnson
- Wayne Keeostra
- Michelle Lintger
- Scott Mahoney
- Randall McMurray
- Mark Mullenberg
- Kelly O’Mara
- Thad Robinson
- Gela Rosema
- David Sima
- Dan Spangler
- Jeff Topor
- Robert VanDaam
- Stephanie Vasquez
- Karen Wafer
- Gabriella Wyllis
- Charity Anderson
- Robert Bentley
- Martha Bravo
- Harold Channels
- Maurice Costello
- Patty Denusha
- Dave Edwards
- Theresa Gooden
- Daniel Hylen
- Charles Kile
- John Lachmann
- Diane Likski
- Dany Malone
- Mark Minnema
- Penny Myers
- Margaret Patterson
- Jessica Rodriguez
- Jeff Short
- Leonard Smedley
- Sara Sullivan
- Robert Tomes
- Dan VanFarrowe
- Jonathan Verstrate
- Marc Westrate
- Emily Zhao
- Jared Bachmeier
- Carl Berg
- Kimberly Bruce
- Brennan Clendenning
- Chad Covington
- Jeff DeWitt
- Ron Edwards
- Lynn Grunow
- Jim Jakubowski
- LuAnn Klinkers
- David Lemeux
- Candy Lockhart
- Andrew McCloskey
- Halima Mohamed
- Terry Noms
- James Penive
- Sandra Rodriguez
- Ashley Shoulders
- Amanda Smith
- Tashika Taylor
- Tyler Tenman
- John Vann
- Isabella Waite
- David Williams
- Ben Baine
- Allen Blal
- Eric Bufford
- Camerino Comejo
- Michael Dahlstrom
- Marvin Dupey
- Sandra Ellen
- Scott Hale
- Daren Jenson
- John Johnson
- David Lintger
- Jeff Lynema
- Robert McHugh
- Casey Mooney
- Asare Ofeh
- Marc Reiger
- Teil Roelofs
- Tom Shuck
- Mark Sokolowski
- Darren Thornton
- Ratu Tunaqaalu
- Tamara Vargo
- Darrell Waller
- Mark Wilson

Current Custodial Staff 2018
Facts

- 106 Custodians maintain approximately 4,000,000 square feet of space on campus.
- 1.7 Million square feet is LEED Certified – these spaces drive our green cleaning housekeeping measures throughout campus.
- Provide setup and teardown services to athletic events, camps and conferences as well as student life events throughout campus.
- Facilitate “Project Donation” at the end of each academic year.
- Other services provided – snow removal at every building entrance, trash/recycling/compost collection, light bulb changes, small furniture moving.
GVSU’s Green Cleaning Program History

- 14 years ago the custodial department aligns with the University’s strategic value of “modeling sustainability in our campus operations” 7th on the list of the University’s core values.
- Initiated by Steve Leeser - Operations Supervisor and Gloria Myaard - Facilities Services Supervisor
- Adapted purchasing policies and green housekeeping procedures to complement the LEED certified buildings.
- Sustainability Office at GVSU established 13 years ago
- 2007 RecycleMania participant - 1st year
- 2014 Green Housekeeping Policy formally established
- 2018 Grand Award Winner - American Schools and Universities
Green Cleaning Initiatives

- RecycleMania Participation
- Air Quality improvements - HEPA Filtration vacuums, elimination of propane burnishing
- Water Minimization – microfiber technology, low water use and chemical free scrubbers
- Energy Saving Measures - strategic staff scheduling during daylight hours
- Continuing Education – APPA workshops, ISSA tradeshows, vendor partnered training
Common images surrounding our custodial operations
Lean Principles - 5S Methodology

- 5S is a workplace organization method
- Developed in Japan as a technique that enabled JIT (Just in Time) manufacturing.
- Now being applied in the healthcare, education, and government environments.
Why 5S

- Make work easier
- Make it easy to find cleaning materials and equipment
- Keep closets clean and organized
- Initiate structure
- Empowerment – Sense of pride and ownership
5S Management

ASSESS → PLAN

REVIEW ← IMPLEMENT
Before
After
Floor Care Lean Principles

- Introduction of square scrub technology with random orbital motion and surface prep pads
- Reduction of chemical stripper
- Reduction of water use
- Elimination of propane burnisher use (IAQ improvements)
- Safe work environment
- Better looking VCT for longer periods.
Challenges and Obstacles

**5S Methodology**
- Logistical Challenge
- Regular oversight
- Ownership

**Floor Care Program**
- Traditional methods
- Technology
- Little resistance – created a financial challenge
Results

5S Methodology
- Identified duplication
- Improved response time
- Inventory management
- Better use of space

Floor Care
- Reduce Chemical usage
- Improvement in appearance
- Lower risk of injuries
- Higher production rates
Keys to Success

- Simplify the processes and procedures
- Keep innovating – go for it...
- Consider all facets of your program as areas that can be greener and more sustainable.
Get Lean and Sustainable
The 5S Program
Reducing Waste
Lean - What Is It?

- A Lean organization is one that uses less of everything
- It is an on-going commitment
- In-depth and sustainable approach
- Set of principles, a common language
- Everyday approach to building flexibility
The Logic of Lean

• Understanding the source of the waste
• Focuses on the processes that create value
• Just as much about the people as the tools
• It becomes part of the culture
Why Is Lean So Special?

- Proven
- Makes Sense
- Accessible
- Inclusive of Everyone
Learning Never Ends
Waste

If you see waste, you can get rid of it!

7 WASTES

- Delay
- Defect
- Over production
- Inventory
- Transportation
- Motion
- Processing
Eight Wastes - Motion

Definition: Any movement that does not add value to your product or service
Definition: Anything in excess of one-piece flow
Too much stuff
Eight Wastes - Transportation

Definition: moving people, materials and information around the organization

Example:

Having people run to pick up things instead of planning better
Eight Wastes - Under-Utilized People

Definition: not tapping into people’s education, skills, experience, knowledge, creativity, etc.

Examples:
- Learning that one of your employees is a volunteer leader in an outside organization
- Not listening to ideas or suggestions from the value-adders on how to make improvements
Eight Wastes - Defects

Definition: Anything that needs to be scrapped, adjusted, reworked, etc.

Examples:

- You are not provided with the complete information or accurate information
- You just fix things yourself
- Having to rework anything that was not done right the first time
Step 1 - Sort & Separate

1. Sort
2. Dispose of those items that are no longer necessary, obsolete, or do not belong in the area using the red tag technique
   - Remember – “when in doubt, throw it out!”
   - Develop a system (box system – everything in a box and take out what you need, when you need it and at the end of 6 months, the rest is trashed)
   - Separate items remaining between those required on a daily basis and those needed on an irregular basis (3 categories: daily, weekly or “X-mas” items)
3. Find alternative storage locations
Step 2 - Scrub and Shine

Systematically clean equipment, tools and area
• Elevate all items to a standard level of cleanliness
• Eliminate or contain sources of dirt, dust, oil, scrap, and other foreign material
• Adopt cleaning as a form of equipment inspection
• Build a visual standard routine and integrate
• Supplies must be easily accessible
Scrub and Shine - What Happens?

- Sweeping, wiping, picking up and keeping things in order
- Part of the daily routine
- Cleanliness is closely related to attitude and quality
- Enhance quality, pride and safety
Don’t Let Your Tools Look Like This
Step 3 - Set

- Determine a home location for each item based on frequency of use
- Determine storage quantities
  - Minimize the number of items stored in work area (min/max)
- Set safe height and size limits
- Standardize names, color code, label, identify at a glance
- 5S Board – pictures say a thousand words
- Personal items – must have a home too.
5S Board Example
Step 4 – Standardize/Systemize

- Objective – easy for anyone to find anything, anytime
- Organized so everyone easily return items used, give an address – even things that sit on the floor – carts, buckets, trash containers.
- Create a visual system (color code, signage, photos, document)
- Multiple Storage or work areas – set them up similarly
Step 5 - Sustain Discipline

- Goal = 100% adherence to standards
- Workplace becomes supervisor
- Reward adherence & strengthen 4 steps
  - Checklist/audit
  - 5-S Patrol
  - Visual System Support Team
  - Management Walks
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<th>Number</th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are all activities in the cleaning plan completed as planned?</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Are floorspace markings intact?</td>
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<tr>
<td>3</td>
<td>Is the floor cleared and according to standards?</td>
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<tr>
<td>4</td>
<td>Are tools placed in the right places?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Are cleaning aids placed in their right places?</td>
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<tr>
<td>6</td>
<td>Is the 5S board updated?</td>
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<tr>
<td>7</td>
<td>Are all the items stored in the area relevant?</td>
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<tr>
<td>8</td>
<td>Are all actions with passed deadline completed?</td>
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<tr>
<td>9</td>
<td>Supplemental question</td>
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</table>

Score: 0
Thank You!

Contact Information
Renae Hesselink, LEED AP BD+C
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(231) 799-3517
Orbital Technology
Disc / Rotary

- Disk or Rotary style floor scrubbers uses a circular motion with a round pad or brush to agitate a cleaning solution against the floor to release soils. Standard Speed for Disc/ Rotary 175-350 RPM

Orbital

- Similar to the disk style, square oscillating or orbital floor scrubbers move in a vibrating motion at a much faster speed. Standard Speed for Orbital 2250 RPM
Orbital Technology History
Orbital Benefits

- #1 USE for Orbital Autoscrubber.
- Will Remove 1 to 3 coats of finish
- 1000 sf in 15 to 20 minutes (with a 14X 20 AS)
- Just Use Water
Orbital Benefits

- 50% labor saving compared to traditional methods
- For Daily Cleaning 40 – 70% reduction in water and chemical use
- Conventional reduces over all floor pad wear
- Autoscrubbers achieve Longer run time
- Able to get on corners versus Disc or Rotary Scrubbers
Various Platforms
Multiple uses
Multiple uses
THANK YOU
Questions?
Platinum Sponsor

**UNGER.**

Quality Tools for Smart Cleaning™

Gold Sponsors

**Bona.**

Petroleum for wood floors.

**ECOLAB.**

**ECOS PRO.**

**GOJO.**

**ORBIO TECHNOLOGIES.**

Silver Sponsors

**Americo**

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**Solaris Paper**

**Spartan Chemical Company, Inc.**

**Tork, an Essity Brand**
Thank You!

• Visit [greencleanschools.org](http://greencleanschools.org) for resources and to register for upcoming events.

• A recording of the webinar and the presentation will be posted to our website and emailed to attendees.