and

**GREEN SOLUTIONS LLC**

YOUR SOLUTION TO CLEANING GREEN

- Truly Green - No Green Washing!
- As effective as traditional products
- Cost effective

Bill Scherer - President

3 Founding Principles - Our products:
Offers only “Green” non-toxic cleaning alternatives to the standard commercial cleaners

Common questions---

- What is really Green?
- Does it work as well?
- How much does it cost?
- How do I select and develop a Green program?
- What are the real benefits?
- What’s the difference between 3rd party certifications?
Two Types of Commercial Green Buyers

Green Buyer #1
My boss said to get something green. So, the first green products I found, that worked, I bought them. That was easy!

Green Buyer #2
Our green team sat down to evaluate the several green brands available. After completing our research, we decided on not only the most effective, but also the products with the highest green content.

Core Elements of an Effective Green Housekeeping Program

1. Use Bio-based & Environmentally Preferable Cleaning Products
2. Air Flow Control
3. Maximize Matting
4. Vacuum with Micro Filter – H.E.P.A.
5. Eliminate Aerosols – V.O.C.’s
6. Low Impact Floor Care Program
7. Identify Bio-Contamination Points
8. Effective use of Disinfectants
9. Maintain H.V.A.C. Filter Media
10. Moisture/Odor Control
The Problem is Real!

- 90% of our time is spent indoors
- “30% of buildings worldwide generate excessive IAQ complaints.” World Health Organization
- “78% of asthmatics become worse when exposed to the fumes from cleaning products.” American Medical Assoc.
- 20 million Americans including 6.3 million children have Asthma.
- 1 out of 6 people have asthma or allergies
- Approx: 14 million schools days and the equivalent in work days are lost due to allergies and asthma

3rd Party Certification
What’s the difference?

- Green Seal
- Environmental Choice
- Design for the Environment
3rd Party Certification
Green Seal

- Most recognized certification in the U.S.
- Meets LEED Requirements
- Allows Certified Products to contain petroleum, NPE’s and APE’s.
- NPE’s and APE’s are banned in Canada and most of Europe.

3rd Party Certification
Ecologo

- Most recognized certification in North America and Europe
- The toughest standards to meet with regard to cleaning products
- Does not allow NPE’s or APE’s in certified cleaning products
- Just purchased by UL (United Laboratories)
Product Evaluation & Selection Criteria:

- Performance – Trial & Test
- Health & Safety (HMIS) Rating – Average of the 5 basic cleaners = 1.2
  - Disinfectant, All Purpose Cleaner, Washroom Cleaner, Glass Cleaner & Degreaser
- Bio base content of the products
- Color and Numeric Coding System
- Third Party Certified

UNDERSTAND THE RATING SYSTEM

<table>
<thead>
<tr>
<th>Number</th>
<th>Degree of Hazard</th>
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<tbody>
<tr>
<td>0</td>
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<tr>
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<tr>
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<td>SERIOUS</td>
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<tr>
<td>4</td>
<td>EXTREME</td>
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The diamond is subdivided into four general categories:
1. Health (blue)
2. Flammability (red)
3. Reactivity (yellow)
4. Protective Equipment (white)
Why Green Cleaning & Cleaners?

- Traditional Cleaning focus on appearance
  - Pick up dirt & debris
  - Remove Moisture
  - Pick up food sources

- Problems with traditional cleaning products:
  - Petroleum distillates – Crude oil feed stocks
  - VOC (Volatile Organic Compounds) – Solvents, Butyl
  - Carcinogens – cancer causing
  - Reactive – Dangerous when mixed with other product
  - Toxic – Harmful to skin, eyes & internal organs
  - Corrosive – burn skin & eyes
  - Flammable
  - Environmental impacts

The Purpose of Green Cleaning:

- Impacts on human health
  - Professional housekeepers
  - Building occupants
  - Visitors

- Impacts on the environment
  - Indoor air quality
  - Atmosphere, soil, water, wildlife
Sick Building Symptoms

- Headaches
- Eye Irritation
- Dry Cough
- Dry or Itchy Skin
- Nose and Throat Irritation
- Dizziness
- Nausea
- Difficulty in Concentrating
- Fatigue
- Odor Sensitivity

Chemical Management Systems Source Reduction

- Reduces Packaging
- Reduces Transport
- Reduces Consumption
- Improves Productivity
- No Contact with Concentrate
- Insures Product Performance
- Easier Training
- Security

Side benefit - “30 Percent Or More Savings”
• Our Training:

We provide comprehensive training to all of your cleaning staff on how to “Clean Green”. We then certify each cleaner and provide marketing material to let everyone know that your organization cleans green!

Product Development Criteria

• Cleaners that are safe for the custodial staff & building tenants.
• Cleaner must have bio-based ingredients
• Products must work as well as conventional products
• Comparable cost
• Source reduction with concentrate
• Life cycle approach
Green cleaning chemicals may be responsible for fewer sick days, better employee health

By Ashanti M. Alvarez

Antolina Pittman says she no longer gets rashes or lung irritation when she uses the new Enviro-Care cleaning products, a green cleaning system adopted by Rutgers more than a year ago.

“Before, I used to get rashes from several of the products,” said Pittman, a custodian group leader for Facilities and Maintenance Services (F/MS) and a Rutgers employee of 33 years. “I had to use gloves and a mask because they smelled so bad.”

“None of the new products have a scent that I can detect,” said Dale Baldwin, a custodian with 22 years of service at Rutgers.

Now that F/MS uses environmentally friendly cleaning products from the firm Rochester Midland, Pittman and other custodial workers are experiencing better work days and better health; a review of the absence records of 240 employees showed that they took 12 percent fewer sick days in the year since adopting the new products compared to the previous year.

Summary

- The world is changing. Our responsibility is to the future.
- How we clean makes a big difference.
- The solution is in a total Green to the Core program; not just green products.