



BMS BUILDING MAINTENANCE SERVICE

# *Sustainable Green Cleaning*

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New York  
Washington  
Philadelphia  
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## *Description of Firm*

- NY, Boston, San Francisco & Washington DC
- Annual Sales of Over 200M
- 50 Million Square Feet of:
  - Class A Office Bldgs
  - Commercial & Institutional Properties
    - Retail Malls
    - Hotels
    - Educational Facilities
- 2,300 FTE's

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# Our Vision

- Be the provider of “**Best in Class**” janitorial services in a cost effective manner, while creating a safe, clean, comfortable work environment.
- Sustain a professional and diverse company through positive behaviors committed to core values.

DIVERSITY

INNOVATION

# Our Mission

- Consistently deliver high quality services and solutions to our customers.
- Strengthen our business through continuous evaluation and self improvement.
- Partner and share expertise to leverage maximum value.
- Create a work culture that encourages and rewards exceptional performance, innovative solutions and promotes teamwork.
- Develop employees through training, knowledge exchange, and fostering diverse perspectives.

QUALITY

TEAMWORK



# **BMS** GREEN CLEAN<sup>SM</sup> Program

- **Practices that promote sustainability including:**
  - **Measures to increase efficiency**
  - **Use of renewable resources**
  - **Decrease production of waste and hazardous materials, both in BMS's own operations and in those of its suppliers.**
- **Promoting health, productivity and safety of the BMS community through design and maintenance of the building environment.**
- **Enhancing the health of our buildings by improving Indoor Air Quality (IAQ).**
- **Develop planning tools to enable comparative analysis of sustainability implications and to support long-term economic, environmental and socially responsible decision-making.**
- **Encouraging environmental inquiry and institutional learning throughout the company.**
- **Establishing indicators for sustainability that will enable monitoring, reporting and continuous improvement.**
- **A minimum of 60% of our cleaning and maintenance supplies will meet the LEED EB: O&M procurement standards.**
- **Establish portfolio wide US Green Building Council standards and secure up to 16 points for LEED-EB: O&M certification.**



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# The Impact of Cleaning on the Environment

## Why We Should Be Concerned?

- 6.0 Billion pounds of Chemicals
- 4.5 Billion pounds of Paper
- 0.5 Billion pounds of Equipment
- 35.0 Billion Plastic Liners



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# The Impact of Commercial Buildings

- 80% of our time is spent indoors.
- EPA rates Indoor Air Quality (**IAQ**) as a top 5 health risk.
- Two-thirds of commercial buildings are rated “sick”.
- State and local governments are mandating more environmentally purchasing, products and procedures.

**\*The USA comprises about 5% of the world’s population and annually produce 27% of the world’s garbage**

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## Impact of Cleaning on Occupants

- Occupational asthma on the increase
- 10 million lost work days each year do to poor IAQ
- 20% are eye and skin burns (chemical exposures)

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## Benefits of a Green Building

- **Environmental** – Enhance and protect ecosystems, improve air and water quality, reduce solid waste and conserve natural resources.
- **Economic** – Reduce operating costs, enhance asset value and profits, improve employee productivity and satisfaction.
- **Health and safety** – Enhance occupant and employee comfort, safety and health.
- **Community** – Minimize the strain on local infrastructures (water treatment, utilities and health care facilities and costs) and improve quality of life.
- **Environmental** – Enhance and protect ecosystems, improve air and water quality, reduce solid waste and conserve natural resources.
- **Customer Driven** – Mandating more environmentally purchasing, products and procedures

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# Changing the Culture

- Changes in the organizations policies and culture
- Preconceived perceptions and performance of green items / products
- General lack of knowledge and understanding
- **It's not an event, it's a journey!**

*The key to implementing a successful Green Cleaning program is to gain the commitment from management, occupants and employees.*

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## Administrative Support

- Essential to have top management support for implementing green cleaning
  
- Implement a team to come together to make changes in cleaning products and apply proper cleaning procedures
  - President, Management, Supervisors, Employees

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## Green Cleaning – It's Not Just About Chemicals!

- Products
- Disposable Janitorial Products (i.e. paper products)
- Equipment
- Procedures and Policies
- Documentation
- Source reduction and pollution prevention
- Safe for building occupants
- Safe for cleaning staff (especially product users)
- Safe for environment (creates minimal amount of pollution)

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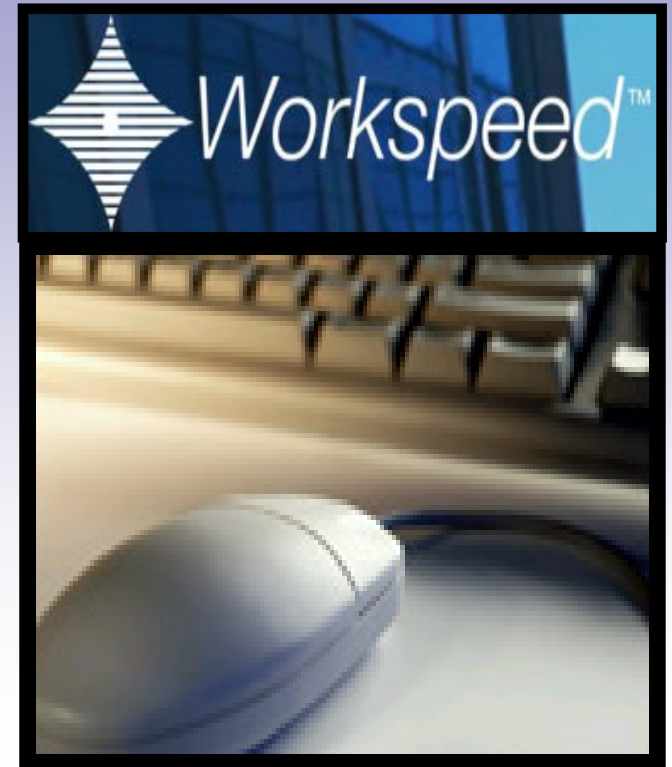




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# *Planning System & Controls*

- WorkSpeed PM Database WO System
- Quality Control & Inspections
- Employee Training and Tracking
- Shift Workload Planning



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# Training

- Value your employees and protect their health and safety with classroom multilingual DVD training, 'on the job', multilingual wall chart, and color coded training programmes and tools



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# Employee Retention

- By providing the equipment they need, products that work, professional training and protecting their health and safety, employees are more likely to stay
  
- Turnover Rate – 4%





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## Janitorial Paper & Other Disposable Products

- Minimum Comprehensive Procurement Guidelines
  - [www.epa.gov/cpg/products.htm](http://www.epa.gov/cpg/products.htm)
  - Toilet tissue: 20% minimum PC content
  - Paper hand towels: 40% minimum PC content
  - Plastic trash liners: 10% minimum PC content
- Processed chlorine free
- Large rolls
- Hands-free dispensers that limit paper
- Micro-fiber cloths, mops and bonnets
- Recycled containers, buckets, carts, mats, etc.

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# Cleaning & Janitorial Maintenance Products Guidelines

- #1 Green Seal Certified products
  - [www.greenseal.org](http://www.greenseal.org)
- #2 Environmentally Preferred Products (EPA)
- Use low Volatile Organic Compounds (VOC) products for other categories
- MSDS training – full disclosure
- Use concentrates with dispensing equipment
- Increase the “life” of finishes (proper maintenance)
- Use Green Seal Certified floor finishes and strippers
- Maintain a log of all cleaning activities
- Train cleaning personnel (procedures and policies)



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## Janitorial Equipment Guidelines



- **Vacuums meet CRI's Green Label Program**
  - [www.carpet-rug.com](http://www.carpet-rug.com)
- **Extraction equipment remove sufficient moisture to dry carpet in 24 hours**
- **Buffers & burnishers with vacuum attachments**
- **Auto scrubbers equipped with variable-speed pumps and environmentally preferable batteries (gel batteries)**
- **Evaluate equipment ergonomics**
- **Establish equipment maintenance logs**



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## Janitorial Chemical Mixing / Storage Areas

- Provide adequate and secure storage areas with appropriate plumbing and chemical dispensing equipment / units
- Eliminate clutter
- Implement a plan to maintain the dispensers and organize storage areas
- Provide training on appropriate chemical usage and storage
- Vendor Management Inventory (VMI)



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Cans, bottles and other containers go into the Glass, Metal & Plastic Bins in the pantry.



Cleaning staff consolidates recyclable bottles & cans inside the loading dock bins



Cardboard is placed by your deskside or designated area for pickup.



Cleaning staff consolidates dry office waste and cardboard inside the loading dock compactor



Mixed paper and dry office waste goes into your deskside bin



The recycling company hauls the recyclable waste to the

# RECYCLING LIFE-CYCLE (SINGLE DESKSIDE BIN)



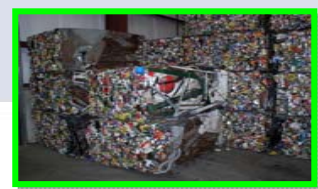
Workers at the sorting facility separate the clean mixed paper, and bottles & cans from a conveyor belt system to be baled for shipment.



Bales sold to manufacturers who make recycled products for resale



**\*PLEASE NOTE:** Remaining trash goes to a landfill. Over 95% of a commercial building's recyclable materials are recovered and recycled from this system.



Bales sold to manufacturers who make recycled products for resale



Recycled paper



Recycled plastic

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Recycled paper products are sold back to you for reuse in a "cradle to cradle" life-cycle.

**A "CRADLE TO CRADLE" LIFE CYCLE OF PAPER**



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## Exterior Building Maintenance Entryway Systems and Maintenance

- **Keep the contaminants / debris out and capture them at the building entrances**
  - All entrances must have entryway systems (matting). Approximately 10 feet in length from the entrance.
- **Develop and implement a plan to track and document the cleaning of the entryway matting**
- **Utilize biodegradable de-icers and switch from sodium and calcium chloride to potassium and magnesium chloride. Do Not over apply!**
- **Limit the use of water by washing and rinsing the sidewalks and walkways twice a week.**
- **Use environmentally preferable exterior cleaning chemicals**

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# High Performance Cleaning

- Evaluate and implement how the facility is defined for cleaning purposes
- All one level?
- Different standards & procedures for different areas?


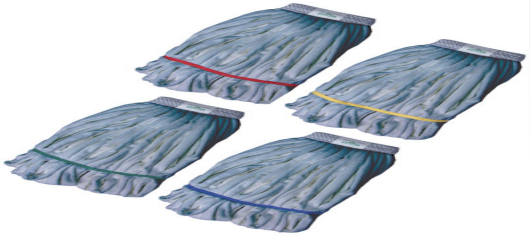
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# Microfiber Designation

MicroFiber	Color	Intended Use
	Blue	Lobbies and Common Area Cleaning
	Yellow	Pantry Area Cleaning
	Green	Light Duty Restroom Cleaning Only (Faucets, Counter Tops, Sinks, Walls, Partitions, Glass, Stainless Steel)
	Red	Heavy Duty Restroom Cleaning Only (Toilets and Urinals)
	Blue	Lobbies and Common Area Floor Cleaning
	Red	Restroom Floor Only

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- Annual Chemical Usage Reduction – 87%
- Annual Water Usage Reduction – 84%
- Annual Mop Purchase Reduction – 95%

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**Simple. safe. Sustainable.**



**Clean without chemicals.  
Kill harmful bacteria and the H1N1 virus.\*  
Protect the public health.**

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ecH2O™

***Just fill with H2O and Go!***

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## Conclusion

- Going “Green” has proven over & over that there are many benefits
- Improved health & safety of the users of the products and the occupants & visitors to the building is the most important
- The benefits to the environment, the positive effect on overall long term cost, the potential increase in productivity, are other important benefits.