

Appalachian State University Environmental Services

Green Cleaning Policy and High-Performance Cleaning Program

OP-4

OP-4 Green Cleaning and Sustainability

CONTENTS

Policy Overview.....	3
Scope.....	3
Goals	3
Program Goals.....	3
Performance Goals.....	3
Responsibilities	4
Time Period.....	4
Products	5
Green Cleaning Product Use	5
Sustainability Criteria	5
Approved Product List.....	6
a) General Cleaning.....	6
b) Floor Care.....	6
c) Paper Products.....	7
d) Trash bags and Liners.....	8
e) Hand Soap	8
f) Occasional Use Products.....	9
g) MicroFiber Laundry.....	9
Performance Metric.....	9
Equipment.....	10
Green Cleaning Equipment Use	10
Sustainability Criteria	10
Performance Metric.....	11
Cleaning Procedures	11
General Strategies for Sustainable Cleaning.....	11
Cleaning Procedures for Specific Areas	11
Chemical Safety Procedures	12

Labels and Material Safety Data Sheets (MSDS).....	12
Personal Protective Equipment (PPE) and Safety Controls for Staff	12
Cleaning with Chemicals and Chemical Safety	12
Mixing Chemicals	13
Chemical Storage	13
Chemical Concentrates and Dilution Systems	13
Performance Metric.....	13
Cleaning and Vulnerable Building Occupants	14
Hand Hygiene.....	14
Energy and Water Conservation	14
Energy	14
Water	14
Staffing Planning	15
Staff Training.....	15
Policy Review	15
Quality Control.....	15
Annual Review	16
Occupant Feedback.....	16
Definitions & Resources.....	16

POLICY OVERVIEW

The Green Cleaning Policy is intended to stand as Appalachian State University Environmental Service's stated preference for green cleaning and janitorial products. The following document will assist the management in pursuit of the goal to maintain a clean, healthy, and safe building environment while simultaneously minimizing the impacts of cleaning processes, procedures, and products on the natural environment.

SCOPE

This green cleaning policy applies to all building areas within the Appalachian State University campus under the purview of Environmental Services, including functional spaces (offices, classrooms, etc.) as well as public restrooms, lounges and study rooms, public hallways, computer rooms, kitchenettes, stairwells, etc.

This policy is overseen by the Appalachian State University Environmental Services and shall not be revised, changed or updated without management consent.

GOALS

PROGRAM GOALS

The goal of this green cleaning policy is to minimize exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants which may adversely impact air quality, health, building finishes and systems, and the environment, and to balance these needs with the cost and quality (i.e. product effectiveness of the managed systems to provide a sustainable approach to cleaning and janitorial maintenance.)

In addition, it is the goal of Environmental Services to gain "Green" certifications and LEED credits for sustainability and green cleaning via on-going inspections from third party organizations such as Green Seal, International Sanitary Supply Association (ISSA), and International Executive Housekeeping Association (IEHA).

PERFORMANCE GOALS

1. Products

- Goal – Seek to purchase effective cleaning, hard floor and carpet care products that meet program sustainability criteria.
- Metric – Purchases will be evaluated based on the portion of the product (measured by cost) which meet one or more of the sustainable criteria and its effectiveness according to product claims and application.
- Performance – 60% of products by cost should meet this criteria. All products shall be effective in meeting product claims.

2. Operating Procedure

- Goal – Maintain appropriate standard operating procedures, strategies, and guidelines for critical tasks.

- Metric – Procedures will be evaluated based on quantitative audit and inspection results of building spaces as well as employee and customer feedback.
 - Performance – All procedures will meet LEED criteria.
3. Staff Training
 - Goal – Ensure appropriate staff training on an on-going basis.
 - Metric – Training will be evaluated based on time to train staff on new operating procedures and the results of quantitative building audits and inspections.
 - Performance – All staff members will be fully versed on proper LEED safety requirements and procedures.
 4. Occupant Feedback
 - Goal – Collect feedback to ensure continuous improvement and occupant satisfaction.
 - Metric – Occupant feedback will be based on the results of survey and suggestions.
 - Performance – All occupants are pleased with the cleanliness of their buildings.
 5. Budgetary considerations
 - Goal – Meet budgetary considerations.
 - Metric – Costs will be evaluated based on total money spent to enact changes.
 - Performance – Enact green cleaning procedures and policy with as little expenditure as possible.

RESPONSIBILITIES

The Environmental Services Manager, in coordination with the Office of Sustainability, is responsible for developing and managing the implementation of the Green Cleaning Policy

Title	Contact	Phone
Environmental Services Manager	Spencer Dyson	828-262-6440
Resource Conservation Specialist	Jennifer Maxwell	828-262-2667

Personnel involved with various elements of the green cleaning program shall carry out their tasks according to this policy and report all relevant activities to the aforementioned parties. To ensure an effective and coordinated effort, the building staff responsible for overseeing the Green Cleaning Policy shall review all proposed cleaning activities before implementation.

TIME PERIOD

As of December 15, 2014, this policy is applicable at all Appalachian State University campus buildings under the cognizance of Environmental Services' High-Performance Cleaning Program.

PRODUCTS

GREEN CLEANING PRODUCT USE

1. Wherever feasible, cleaning products and materials, including hard floor and carpet care products, used inside and outside Appalachian State University facilities under the cognizance of Environmental Services shall meet the requirements of LEED 2009 for existing buildings: Operations and Maintenance IEQ Credit 3.3: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials as described below.
2. Product types subject to these requirements include, but are not limited to, bio-enzymatic cleaners, hard floor cleaners, carpet cleaners, general purpose cleaners, specialty cleaners, odor control products, disinfectants, disposable janitorial paper products and trash bags, laundry detergent, and hand soaps.

SUSTAINABILITY CRITERIA

1. The cleaning products meet one or more of the following standards for the appropriate category:
 - Green Seal GS-37, for general purpose, bathroom, glass and carpet cleaners used for industrial and institutional purposes
 - Environmental Choice CCD-105, for laundry detergents
 - Environmental Choice CCD-110, for cleaning and degreasing compounds
 - Environmental Choice CCD-146, for hard surface cleaners
 - Environmental Choice CCD-148, for carpet and upholstery care
2. Disinfectants, metal polish, floor finishes, strippers or other products not addressed by GS-37 or Environmental Choice 110, 146, or 148 shall meet at least one of the following standards for the appropriate category:
 - Green Seal GS-40, for industrial and institutional floor care products
 - Environmental Choice CCD-112, for digestion additives for cleaning and odor control
 - Environmental Choice CCD-113, for drain or grease trap additives
 - Environmental Choice CCD-115, for odor control additives
 - Environmental Choice CCD-147, for hard floor care
3. Disposable janitorial paper products and trash bags meet the minimum requirements of one or more of the following programs for the applicable category:
 - U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper and Plastic Trash Can Liners
 - Green Seal GS-09, for paper towels and napkins
 - Green Seal GS-01, for tissue paper
 - Environmental Choice CCD-082, for toilet tissue
 - Environmental Choice CCD-086, for hand towels
 - Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers
4. Hand soaps meet one or more of the following standards:
 - No antimicrobial agents (other than as a preservative) except where required by health codes and other regulations (i.e., food service and health care requirements)

- Green Seal GS-41, for industrial and institutional hand cleaners
- Environmental Choice CCD-104, for hand cleaners and hand soaps

APPROVED PRODUCT LIST

The products listed in the tables below (a-g) are approved for use. Products beyond those listed here must be submitted to the Environmental Services Manager and Resource Conservation Specialist for approval before use. Green products are continually tested by Environmental Services for effectiveness in an effort to improve sustainability of Appalachian State University.

a) GENERAL CLEANING

Custodial Services utilizes the Hillyard Arsenal chemical management system and purchases solutions to meet cleaning needs. The system dispenses product to ensure active ppm required by the EPA, limits employee contact with chemicals for enhanced safety, and the concentrated formulas minimize wasteful containers.

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
HILLYARD	ARSENAL TOP CLEAN	General purpose cleaner	GS-37 Certified	GS-37 Certified
	ARSENAL GREEN SELECT WINDOW CLEANER	Window cleaner	GS-37 Certified	GS-37 Certified
	ARSENAL VINDICATOR+ ¹	Disinfectant	-	-

b) FLOOR CARE

Appalachian State University flooring consists of VCT, terrazzo, brick, concrete, laminate, hardwood, tile and carpeting. Products with low or no VOCs are preferred.

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
PIONEER ECLIPSE	DIAMOND SHINE	Resilient floor wax	-	-

¹ While there are "Green" disinfectants on the market today, this quaternary ammonium disinfectant is used at ASU based on the following: 1) dilution dispenser compatibility for employee safety, 2) bacterial and virucidal efficacy and 3) no observable effects on building finishes and surfaces.

	502 FINAL STRIP HD	Heavy duty floor stripper	-	-
HILLYARD	RECOAT PREP	Floor finish Cleaner	-	-
SPARTAN	GREEN SOLUTIONS	Carpet Cleaner	GS-37 certified. EPA DfE approved	GS-37 Certified. EPA DfE approved
HILLYARD	ARSENAL CARPET PRE-SPRAY	Carpet stain remover	GS-37 certified	GS-37 Certified
SPARTAN	DEFOAMER	De-foamer	-	-

c) PAPER PRODUCTS

Unbleached, recycled-content papers are the preferred choice. Environmental Services offers paper towel dispensers in bathroom regularly maintained by custodial services as the hygienic preference over folded towel dispensers or electric-powered hand dryers.

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
GEORGIA-PACIFIC	CORMATICS T15	Hand towels	GS-01 Certified. EcoLogo CCD-086. Meets EPA 40% post-consumer content	GS-01 certified. EcoLogo CCD-086. Meets EPA 40% post-consumer content.
MERFIN SYSTEMS LLC	CENTER-PULL TOWELS	Hand towels	GS-01 Certified. EcoLogo CCD-086. Meets EPA standards with 80% post-consumer content 100% recovered paper	GS-01 Certified. EcoLogo CCD-086 Meets EPA standards with 80% post-consumer content. 100% recover paper
DÉCOR	CASCADES	Multi-fold hand towels	EcoLogo CCD-086	EcoLogo CCD-086
BLUE MIST	TOILET TISSUE	Toilet paper	GS-01 Certified Meets EPA standards with 45% post-consumer content. 100% recovered paper	GS-01 Certified. Meets EPA standards with 45% post-consumer content. 100% recovered paper

d) TRASH BAGS AND LINERS

Recycled content trash bags are used whenever possible. Green Seal does not recommend products.

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
CALICO	9910441 9910193 9910291NC	Opaque Trash Bags	-	-
APPALACHIAN INNKEEPERS SUPPLY	LMF3340XSHC	Clear Recycle Bags	-	-

e) HAND SOAP

Non-antimicrobial soap is preferred due to the potentially harmful ingredients typically found in hand sanitizers. Green Seal does not certify any hand soap which makes claims of sanitizing, disinfecting, or antiseptic qualities, since these products can contain phosphates, nitrilotriacetic acid, ethylene diaminetetra-acetic acid, halogenated organic solvents, and/or butoxy-ethanol.

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
BETCO	CLARIO GREEN EARTH FOAMING SOAP	Hand soap	GS-41 certified.	GS-41 certified.

f) OCCASIONAL USE PRODUCTS

The following products are used occasionally on an “as needed” basis.

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
SCOTWOOD INDUSTRIES	ROADRUNNER	Ice Melt	-	-
MONGRO INC.	SNO-PLOW	Snow/ice melt	-	-
(Various)	DISTILLED VINEGAR ²	Road salt remover	-	-
HILLYARD	ARSENAL GREEN SELECT DEGREASER	Degreaser	GS-37 certified.	GS-37 certified.
CORRECTION ENTERPRISES	CLEANSER POWDER WITH BLEACH	Scouring powder	-	-
RENOWN	BACTERIAL DIGESTANT	Odor control	-	-
SCOTT	AIR FRESHENER	Air Freshener	-	-

g) MICROFIBER LAUNDRY

Manufacturer	Product	Purpose	Sustainability Features	LEED 2009 EB:O&M Compliant Criteria
SPARTAN	CLOTHESLINE FRESH	Laundry Detergent	-	-

PERFORMANCE METRIC

The purchase and use of the products listed above shall be implemented to the extent practicable, with a target goal of 60% of the total annual purchases of these products (as measured by cost) complying with the appropriate sustainability criteria. The Environmental Services purchaser and/or Environmental Services vendor(s) will track purchase rates on a monthly basis and report to the Environmental Services Manager quarterly.

² There are no white vinegar products certified by Green Seal or UL CCD. However, two types of vinegar exist: 1) vinegar derived from fermentation processes and, 2) vinegar (acetic acid) derived from natural gas or petroleum. ASU's goal is to use vinegar derived from fermented sources.

EQUIPMENT

GREEN CLEANING EQUIPMENT USE

All new equipment acquisitions for use on the Appalachian State University campus under the purview of the Environmental Services department shall comply with the requirements of LEED® 2009 for Existing Buildings: Operations and Maintenance™ IEQ Credit 3.4: Green Cleaning, Sustainable Cleaning Equipment.

SUSTAINABILITY CRITERIA

1. All Equipment
 - Powered equipment is ergonomically designed to minimize vibration, noise, and user fatigue.
 - Equipment is designed with safeguards such as rollers and bumpers to reduce potential damage to building surfaces.
 - Electric and battery-powered equipment operate at a sound level less than 70 dBA.
 - If battery-powered, equipment should use environmentally preferred gel batteries.
2. Automated scrubbing machines
 - Equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids, or only uses tap water with no added cleaning products.
 - Operate at a sound level of less than 70 dBA.
3. Buffers and burnishers (electric/battery-powered floor maintenance equipment)
 - Equipped with vacuums, guards, and/or other devices for capturing fine particulates.
 - Electric, low-speed.
 - Operate at a sound level less than 70 dBA.
4. Vacuums
 - Certified by the CRI "Seal of Approval" Testing Program.
 - Operate at a sound level of less than 70 dBA.
 - Capable of capturing 96% of particulates 0.3 microns in size.
5. Carpet extractors
 - Certified by the CRI "Seal of Approval" Testing Program for deep-cleaning extractors.
 - Hot water extraction equipment for deep cleaning carpets capable of removing moisture such that the carpet may dry in less than 24 hours.
6. Propane-powered floor equipment
 - Meets Environmental Protection Agency (EPA) standards for specific engine size.
 - Equipped with high efficiency, low emission engines with catalytic converters and mufflers.
 - Operate at a sound level less than 70 dBA.
7. Re-usable/washable rags are to be utilized to clean surfaces throughout the building.
8. Re-usable/washable carpet bonnets are to be utilized.
9. Re-usable/washable dust and wet mops are to be utilized.
10. No equipment shall be used in a manner that voids carpet, fixture or any manufacturer warranties.

As appropriate, all products are to be recycled.

PERFORMANCE METRIC

All newly acquired cleaning equipment shall comply with the sustainability criteria listed above. Environmental Services shall track the percentage of equipment utilized in the building that meets the criteria, based on cost or number of pieces of equipment, with a target of no less than 20% of the existing equipment meeting at least one of the sustainability criteria (other than the requirement for equipment safeguards).

In addition, Environmental Services will maintain an inventory of all powered cleaning equipment, including purchase date and all repair and maintenance activities. Vendor cut sheets for all equipment used on site will be made available on demand. When cleaning equipment replacement is necessary, acquisition dates and supporting documentation shall be retained to demonstrate that all newly acquired equipment complies with all appropriate sustainability specifications.

CLEANING PROCEDURES

The procedures, strategies and metrics below have been adopted at Appalachian State University areas under the purview of Environmental Services to ensure the effective implementation of the Green Cleaning Policy.

GENERAL STRATEGIES FOR SUSTAINABLE CLEANING

1. Assess the areas to be maintained and the usage patterns.
2. Determine how to meet the overall goals of the cleaning program.
3. Develop a comprehensive approach to the maintenance of the building property and determine the product specifications to be used
4. Ensure that in-house maintenance staff are educated on the policies.
5. Ensure that safety, health, and environmental practices are compliant with applicable local regulatory requirements.
6. Outline building-specific procedures with Physical Plant for the proper disposal of all cleaning wastes.
7. Development of cleaning strategies should focus on the following:
 - Efficient use of chemicals
 - Efficient use of supplies
 - Meeting the hygiene and appearance goals of the building/property
 - Protecting the building's occupants, systems and finishes from contaminants that adversely affect them
 - Addressing the frequency of cleaning in all areas (see specifications)

CLEANING PROCEDURES FOR SPECIFIC AREAS

Cleaning and safety guidelines for specific areas can be found in Environmental Services Operating Instructions 1-10. Specific area types addressed in the operating instructions are:

1. Restrooms (daily cleaning)
2. Common Areas
3. Offices and Classrooms
4. Showers and Locker Rooms

5. Stairwells
6. Entryways and Exterior Walkways
7. Elevators
8. Housekeeping Closets
9. Hard and Carpeted Flooring (cleaning, stripping, and refinishing)
10. Microfiber Laundry

Indoor air quality and environmental impact start at the door. Appropriate matting, properly placed and maintained, will prevent indoor floor surfaces from wearing prematurely, decrease contaminants inside the building, and prevent slips and injury. All public points of entry into buildings under the purview of Environmental Services on the Appalachian State University campus are equipped with walk-off mats. All walk-off mats at all public building entries measure a combined minimum of 10 linear feet in the direction of ingress.

CHEMICAL SAFETY PROCEDURES

The following protocols have been established to mitigate spills, leaks and mismanagement. All practices below are communicated to custodians working on the property in a formal training setting on a biannual basis.

LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS)

- Follow all chemical labels and MSDS warnings and use products only as directed.
- Employees shall never use an unlabeled container.
- Employees shall never use any chemical product if uncertain what it is.
- Report to cognizant supervisor all missing or unreadable labels
- A current MSDS for all chemicals shall be maintained in each building in a readily accessible location.
- MSDS for disused chemicals shall be maintained at Estes for a period of 30 years after the chemical was disused.

PERSONAL PROTECTIVE EQUIPMENT (PPE) AND SAFETY CONTROLS FOR STAFF

- Wear protective gloves and/or safety glasses as directed on the product label or MSDS.
- Inform your supervisor if PPE is needed.
- Always spray chemicals away from the body, especially eyes and mouth. Whenever possible, spray chemical into microfiber cloth.
- Do not eat or drink near any cleaning chemicals and always wash hands after using chemicals.
- Never smell, inhale or taste the contents of a chemical container to determine its contents.

CLEANING WITH CHEMICALS AND CHEMICAL SAFETY

- Use only products provided by Environmental Services.
- Employees should only use products they have been trained to use.
- Report all chemical spills to a supervisor immediately and refer to instructions on MSDS for proper spill cleanup and disposal.

- Employees should inform a supervisor if unable to get something clean with the chemicals provided.
- If product comes into contact with any body part, flush immediately with water. Remove any contaminated clothing. Follow first-aid instruction on the label or MSDS.
- All chemical containers are to be securely covered and stored away from flames, heat, and the sun.
- Properly remove all cleaning chemical residue so customers and tenants will not be overexposed to chemicals.
- Wash hands after using chemicals.
- Do not bring products from home.
- Never puncture or collapse an aerosol can. Use only in accordance with label instructions.

MIXING CHEMICALS

- Never mix two different chemical products together: this may cause a dangerous reaction and/or poisonous gas.
- Only fill each secondary container bottle with the exact same product each time you refill.
- Dilute with water only where required.
- Make sure water is turned off and that no chemicals remain in mop buckets, dispensers or machines.
- Make sure all caps are secure when returning chemicals to rack or closet.

CHEMICAL STORAGE

- Do not store chemicals above eye level.
- Do not store or consume food or drinks around chemicals (No food or beverages may be kept on housekeeping cart).
- All chemicals must be stored in a manner that limits opportunities for accidental spills, leaks and other mishaps.

CHEMICAL CONCENTRATES AND DILUTION SYSTEMS

- It is the intent of building management to have chemical concentrates used whenever possible in order to lower transportation costs between manufacturer and end-user, reduce use of packaging materials, reduce real chemical use to obtain same performance, and to lower exposure of maintenance personnel to hazardous chemicals.
- A portion controlled, closed dilution system is to be utilized in order to further reduce environmental impacts.
- Pre-labeled containers are to be utilized.
- Chemical concentrates shall be used with dilution systems to the maximum extent possible. Hillyard Arsenal chemical concentrates shall be used only with the Hillyard Arsenal chemical management system..
- Dilution systems and portion control devices shall never be tampered with or bypassed.

PERFORMANCE METRIC

- Safe handling and storage of cleaning chemicals shall be evaluated by supervisory spot checks and inspections and monitored evolutions.

CLEANING AND VULNERABLE BUILDING OCCUPANTS.

- The needs of vulnerable building occupants, such as occupants with asthma, other respiratory conditions, compromised immune systems, or sensitive or damaged skin, in Appalachian State University campus buildings under the purview of Environmental Services will be addressed to ensure that adequate precautionary measures are taken in relation to the Green Cleaning Program. Product selection and use should vary on a case-by-case basis, as needed.

HAND HYGIENE

- All restroom facilities, public areas, and back-of-house spaces shall include appropriate hand-push soap dispensers (see Approved Cleaning Products list).
- Staff will be educated on the importance of hand hygiene through informative seminars.
- Protocols promoting hand hygiene shall be adopted.
- Quality control checks will be used to ensure adoption.
- All staff will be required to clean their hands using this soap upon the completion of their work day to protect their health as well as others.

ENERGY AND WATER CONSERVATION

ENERGY

- Cold water shall be used in lieu of hot water at all times except with carpet extractors. Use of cold water reduces energy consumption by water heaters, reduces the possibility of burns or scalding to personnel, and minimizes harmful off-gassing of chemicals. All cleaners and concentrates listed above are effective when used with cold water.
- Lighting shall always be turned off in unoccupied spaces. Many locations across campus are equipped with automatic shut-off devices or motion sensors and function on a time delay to turn off lighting automatically when the space is no longer occupied. Some lighting is designed to stay on for safety or security purposes and shall remain lit.
- Windows and doors shall be shut to maintain environmental controls efficiency and fire boundaries.

WATER

- Potable water shall be conserved to the maximum extent possible. Strategies for minimizing use include using a spray bottle of water and cleaning chemical in lieu of a bucket of water and cleaner, using the appropriate dilution rates with concentrated chemicals to minimize post-clean rinsing, and mixing only the amount of chemical and water needed to perform duties.
- Laundry machines used for microfiber shall be run only with full loads of microfiber cloth.
- Waste water shall be disposed only in sanitary sewer systems.
- Employees are required to report malfunctioning fixtures that waste water (e.g. toilets, faucets, water fountains, etc.) to their supervisor immediately.

STAFFING PLANNING

Appalachian State University Environmental Services employs 0 part time custodians and 89 full time custodians. To ensure a clean environment that promotes the health and well-being of building occupants and users, Appalachian State University requires the following:

- Custodians are provided with daily scope of work checklists to ensure all tasks are completed.
- All custodians are given a procedure list to follow and complete.
- Daily and weekly inspections are performed by Environmental Services Supervisors and Managers to ensure expectations and requirements for cleanliness are being met on an ongoing basis.
- Custodial staff meets weekly with their supervisors to discuss any issues. When the supervisor is away a communication log is available to help pass on important information to communicate to one another.

STAFF TRAINING

- All custodians are properly trained in the use, maintenance and disposal of cleaning products, dispensing equipment and packaging. All custodians are trained on new equipment and chemicals prior to initial use. Custodians also receive training about PPE, the prevention of repetitive motion/stress injuries, and the proper way to move and lift objects.
- All custodians receive annual chemical safety training.
- All custodians are educated on the use of products upon their hire and once per year thereafter, as well as annual HAZCOM training. Or, as necessary, to ensure proper use and disposal of products.
- Training records of all staff are to be maintained by the Environmental Services Manager, or person designated by the Manager, and in the Physical Plant AiM system as the centralized and authoritative database. Records can be made available to building management and third parties for review upon request.

POLICY REVIEW

QUALITY CONTROL

Assessment of the ongoing performance of the Green Cleaning program at Appalachian State University will be conducted by a three-part process:

- On a daily basis, the Environmental Services supervisors and management assess custodial performance in the buildings, discuss any issues or challenges, and address any new developments relating to custodial practices.
- An annual survey will be conducted to elicit feedback on cleaning and custodial service from the building occupants.
- Purchasing-related performance will be tracked to ensure compliance with LEED credit requirements as per individual product categories.

ANNUAL REVIEW

The Green Cleaning Policy & Program at Appalachian State University shall continue indefinitely and be reviewed annually with approval from Environmental Services management.

OCCUPANT FEEDBACK

Occupant Feedback will be assessed by a drop box email on the Physical Plant website which will allow occupants to file complaints, concerns or compliments on the cleanliness of the buildings on the Appalachian State University campus.

DEFINITIONS & RESOURCES

Green cleaning involves cleaning products and practices that have lower environmental impacts than conventional products and practices.

Indoor air quality (IAQ) is the nature of the air that affects the health and well-being of building occupants.

A sustainable (environmental) purchasing policy gives preference to products that have little negative environmental and social impact through their life-cycle, and also gives preference to companies whose products have little negative environmental and social impact.

Green Seal

<http://www.greenseal.org>

LEED 2009 for Existing Buildings Operations & Maintenance Rating System (PDF)

<http://www.usgbc.org/ShowFile.aspx?DocumentID=7245>

U.S. EPA Environmentally Preferable Purchasing (EPP)

<http://www.epa.gov/epp/>