SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY ADMINISTRATION POLICY LIBRARY

Sustainable Facilities Maintenance and Renovation Policy

Section Policy # Responsible Executive: Responsible Office: Issued: Latest Review / Revision:

Mark Lichtenstein Facilities November 2021 November 2021



POLICY STATEMENT

This policy applies to all facility maintenance activities and all facility renovations that occur on ESF campuses and properties. It includes (1) guidelines for purchasing materials related to these activities, (2) guidelines for properly diverting/recycling materials generated from these activities (disposal should be seen as a last resort), and (3) managing indoor air quality during these activities.

The following materials are covered under this policy:

- Furniture and furnishings, as well as the components and parts needed to maintain them

- Base building elements, materials and products that make up the building or are permanently or semipermanently installed in the building (e.g., flooring, casework, wall coverings). Note that mechanical, electrical and plumbing components and specialty items such as elevators are excluded (in the LEED framework).

POLICY JUSTIFICATION

ESF strives to be a leader in implementing sustainable facilities, operations and maintenance practices. As a state agency, ESF is also required to implement green purchasing and sustainable materials management practices (under Executive Order 4). Similarly, as a SUNY campus, the College is mandated to abide by existing SUNY Construction Fund directives, pertaining to indoor air quality and construction and demolition materials. This policy therefore reflects both (1) ESF's aspirations to excel in areas core to its brand, historical mission, and identity, and also (2) its obligations as a state agency to meet goals and directives set and approved by NYS legislature and the SUNY governance structure.

SCOPE OF POLICY

This policy applies to:

- ✓ President
- ✓ Vice Presidents
- ✓ Deans, Directors & Department Heads
- ✓ Area Managers & Supervisors

- ✓ Faculty
- StaffStudentsOthers

WEB SITE REFERENCES

This policy:

Policy Office: <u>https://www.esf.edu/physicalplant/</u>; <u>https://www.esf.edu/sustainability/</u> Vice President for Administration: <u>http://www.esf.edu/administration/</u>

CONTENTS

Policy Statement	1
Reason for Policy	1
Scope of Policy	1
Web Site References	2
Related Information	3
Contacts	3
Definitions	3
Procedures	4
Purchasing4	
Materials Management 5	
Indoor Air Quality6	
Performance Measurement	7
Quality Control	7
Responsibilities	8
Revision Record	8
Appendices	9

RELATED INFORMATION

Fair Labor Standards Act (FLSA) Part 516 – Records to be Kept by Employers	http://www.ecfr.gov/cgi-bin/text- idx?SID=dc8bc2797d8cf7f1e268b96a506c1854&mc=true&nod e=pt29.3.516&rgn=div5
NY State Executive Order #4:	https://ogs.ny.gov/greenny-purchasing-requirements-and-tools
SUNY Construction Fund Directives	https://sucf.suny.edu/resources/program-directives

CONTACTS

Specific questions should be directed to the following:

Subject	Contact	Telephone	Office or Department E-Mail / Web Address
Policy Clarification and General Information	Chief Financial Officer and VP of Administration	(315) 470- 6622	policies@esf.edu http://www.esf.edu/au/pp.htm
Policy Development	Office of Sustainability, Facilities Planning, Design and Construction	315-470-4907	<u>sustainability@esf.edu</u> https://www.esf.edu/sustainability/

DEFINITIONS

Routine maintenance	general repair and replacement such as painting, carpet replacement, and ceiling tile replacement.
Renovations include	Includes: building improvements, fit-outs affecting more than one room, or large rooms such as the lobby or board room. Renovations involve multiple elements, such as moving walls and electrical work, or replacing multiple different architectural finishes.
LEED	Leadership in Energy and Environmental Design
USGBC	United States Green Building Council

PROCEDURES

The College shall strive for the following targets.

Component	Goal	Measurement Unit
(1) Materials purchased for facility maintenance and renovations	50% (by cost) of materials purchased will meet the sustainability criteria described below	cost %
(1) Furniture purchases	50% of furniture purchases will meet the sustainability criteria described below	cost %
(2) Materials diversion from facility maintenance	90% of materials will be diverted from landfill and incineration	weight %
(2) Materials diversion from facility renovations	90% of materials will be diverted from landfill and incineration	weight %
(3) IAQ best management practices	IAQ Best Management Practices will be implemented for 100% of renovation projects and 100% of maintenance activities	- SUCF directive 1B-7, Appendix B

(1) Purchasing

Materials purchased for use in ESF's facility maintenance and renovations activities, as well as furniture purchases, will follow the green purchasing requirements set by the <u>NYS Governor under Executive</u> <u>Order 4</u> to the greatest extent practicable. As a State agency, SUNY ESF will follow and use these guidelines, resources and specifications provided by the NYS Office of General Services for purchases pertaining to facilities maintenance and renovations. As described by the NYS Office of General Services is Services:

State agencies and authorities are required to purchase commodities, services, and technology that meet the approved green procurement specifications. Executive Order 4, Establishing a State Green Procurement and Agency Sustainability Program, established the creation of green procurement lists and specifications of commodities, services, and technology for use by state agencies during a procurement. The specifications identify product criteria that will: Reduce or eliminate the health and environmental risks from the use or release of toxic substances; Minimize the risks of the discharge of pollutants into the environment; Minimize the volume and toxicity of packaging; Maximize the use of recycled content and sustainably managed renewable resources; Provide other environmental and health benefits.

(NYS OGS, 2019, Retrieved on 08/10/19, at: https://ogs.ny.gov/greenny/executive-order-4-approved-specifications)

In support of these requirements, New York State's Office of General Services provides detailed <u>green</u> <u>purchasing specifications</u> and <u>approved green purchasing products and vendors</u> for most materials that fall under the scope of this policy. This includes (but is not limited to): Ceiling Tiles and Panels, Carpet and Carpet Tile, Floor Finishes and Floor Removers, Furniture, Paint, Lighting Fixtures, Ballasts, and Lamps, etc. These specifications, applicable to all New York State agencies, meet at least one of the following LEED v4 criteria for Facilities Maintenance and Renovation Policy:

Recycled content. Wood products. Bio-based materials. Materials reuse. Extended producer responsibility.	Cradle to Cradle Certified. Product Manufacturer Supply Chain Optimization. Low emissions of volatile organic compounds. Low emissions of formaldehyde. VOC requirements for wet-applied products.
Extended producer responsibility. GreenScreen v1.2 Benchmark.	VOC requirements for wet-applied products.
OreenScreen V1.2 Denchmark.	

(2) Materials Management

For each facility renovation project, the Project Manager will coordinate with the contracted vendors to discuss and review the scope of the project, which must include a sustainable materials management (SMM) plan. In accordance with the State University Construction Fund's Directive 1B-7 all SUNY campuses will require that all construction and renovation projects "reuse, recycle and/or salvage nonhazardous construction and demolition (C&D) materials from multiple waste streams by weight equal to a minimum of 50% of the total project C&D waste" (SUCF, 2017). ESF has set a college-wide goal of achieving 90% diversion from landfill and incineration by 2025. As such, this Policy sets a 90% diversion goal for construction and renovation projects on all campuses. This goal is more stringent than the SUCF directive.

The SMM plan referenced in the previous paragraph should include a determination of the materials that may be generated as a result of renovation/construction activities. These materials must be separated by category (ex: dry cardboard, untreated wood products, unpainted drywall, clean hard fill, metals, etc). A diversion plan must be created for each category (ex: reused, recycled, landfilled, incinerated). Packaging should be included in this analysis. The approximate weight (or volume) of materials must be estimated for each category.

The SMM plan should maximize the diversion of construction and demolition (C&D) materials from incinerators or landfills (as feasible) and strive to achieve a *minimum* diversion rate of 90% (as of Fall 2021, and subject to periodic review). To achieve this goal, and in accordance with LEED v4 O&M, the five largest waste categories will be determined (at a minimum). The renovation Project Manager will coordinate proper diversion and material disposal/incineration for these material categories. This will involve contacting the appropriate vendors, scheduling haul dates, and ensuring properly sized storage areas for construction materials. The renovation Project Manager will work with independent materials management companies and the College's Grounds Supervisor to achieve diversion of these 5 categories, at a minimum:

- 1) Metals
- 2) Cardboard
- 3) Clean Wood
- 4) Sheetrock
- 5) Hardfill

In support of these state-wide objectives, the NYS Department of Environment and Conservation provides an <u>interactive map and database of C&D debris processing facilities in NYS</u>.

The Project Manager should specify material disposal instructions for each category. These instructions will be distributed to the appropriate contractors. Project Managers must use the Diversion Tracking Log included in the Appendix and provide a completed Log, for each project, to the Sustainable Facilities Manager within one month of project conclusion.

For regular maintenance activities, the Sustainable Facilities Manager and other appropriate supervisors will ensure that the proper materials are diverted from landfill and incineration.

All materials generated from facility renovations will be handled, stored, and sorted separately from materials generated from ongoing campus activities.

All materials generated through facility maintenance activities may be included in ongoing materials streams if the maintenance activities are performed by the campus staff.

(3) Indoor Air Quality (IAQ) Procedures for Maintenance and Renovations

In accordance with the State University Construction Fund (SUCF) directive 1B-7 - "Energy, Sustainability, LEED and Executive Orders" - SUNY ESF will implement an IAQ plan during all construction and renovation projects. According to Appendix B of the SUCF directive, the IAQ plan shall require that procedures meet or exceed the minimum requirements of the "IAQ Guidelines for Occupied Buildings Under Construction", published by the Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA).

The following Best Management Practices (BMP) for indoor air quality control will be implemented as applicable for maintenance and renovations that occur in the project and for maintenance activities requiring material installation/repair lasting longer than one hour. The Project Manager is ultimately responsible for ensuring that these control measures are implemented:

HVAC PROTECTION:

As much as possible, the HVAC systems serving the affected area will not be used during construction. All duct equipment openings will be sealed with plastic. In the event that the HVAC systems must be operated, the return side of the systems will be protected and closed off if possible. Alternatively, temporary filters over the duct openings will be used (MERV 8 or better). All filtration media will be replaced immediately prior to occupancy.

SOURCE CONTROL

Materials meeting the sustainability criteria prescribed above (Purchasing), including low VOC emissions, will be used as much as possible, particularly for paints, carpet, composite wood, adhesives, and sealants that have the potential for significant emissions. All containers for paints, adhesives and sealants will be stored in a separate, secure location at times when construction is not active. During construction, lids will be kept on all containers as much as possible.

PATHWAY INTERRUPTION

Construction areas will be isolated to prevent contaminating non-construction areas. This will be done by sealing off the work areas with plastic and de-pressurizing the construction area. As much as possible, with weather permitting, the construction area will be ventilated using 100% outside air to exhaust contaminated air directly to the outside. Dust guards and collectors will be used on saws, sanders, and other tools.

HOUSEKEEPING

All porous or absorptive building materials, such as dry wall and ceiling tiles, will be protected from exposure to moisture and will be stored in a separate, clean area prior to installation. The entrances to the

construction area will have temporary walk-off mats to collect particulates. The construction area will be sealed off using plastic. During construction, daily housekeeping will include use of vacuum cleaners with high-efficiency particulate filters and sweeping compounds or wetting agents for dust control when sweeping. Prior to building material installation, the installation area will be cleaned to remove dust and debris. Prior to occupancy, the construction area will be vacuumed using high efficiency particulate filters.

SCHEDULING

As much as possible, the use of paints, sealants, and adhesives will be used after normal working hours to prevent building occupant exposure to off-gassing. All absorptive-finish materials will be installed after wet-applied materials have cured. The construction schedule will include time for a building flush out prior to occupancy. See below for flush out details.

FLUSH OUT

The flush out will begin after all construction work, including punch-list items, has been completed and furniture and fixtures have been installed. Finalize all cleaning, complete the final testing and balancing of HVAC systems, and make sure the HVAC control is functional. 14,000 cubic feet per square foot of floor area will be delivered to the space, with an internal temperature of at least 60 degrees Fahrenheit and a relative humidity of no more than 60% where cooling mechanisms are operated. The area will not be occupied until after at least 3,500 cubic feet of outdoor air per square foot has been provided to the space. After occupancy, the outside air will be ventilated at a minimum rate of 0.30 cfm per square foot.

PERFORMANCE MEASUREMENT AND SCHEDULE FOR REASSESSMENT

Annually, or after each renovation (as necessary), the Assistant Directors of Facilities Planning, Design and Construction, Project Managers and the Sustainable Facilities Manager will evaluate whether the procedures described in this policy have been met. This will facilitate and support ESF's annual reporting for both (1) New York State's EO4 mandate and (2) AASHE S TARS. It will also ensure that the goals of this policy are regularly assimilated into ongoing projects and those available strategies and resources are reviewed, discussed, updated and shared among the College's Project Managers. Purchasing and waste logs will be evaluated against sustainability criteria and project goals.

If changes are necessary to the policy, the Director of Facilities, Assistant Directors Facilities Planning Design and Construction, Sustainable Facilities Manager, Sustainability Office and College Leadership will determine how best to change the policy procedures to meet the specified goals for the next renovation and/or for ongoing maintenance activities.

QUALITY ASSURANCE/QUALITY CONTROL PROCESSES

During renovations, the Project Manager will oversee work on the construction site to ensure that the procedures are being followed as required. Manufacturer documentation and purchasing data will be retained to ensure that sustainable purchasing goals are being met, and diversion reports will be retained to ensure that recycling goals are being met. This data will be provided to the Sustainable Facilities Manager. Regular construction meetings will include an agenda item to ensure that the Indoor Air Quality (IAQ) practices outlined in this policy are being implemented.

All maintenance personnel responsible for building repairs will review this policy periodically to ensure that they implement the Indoor Air Quality practices outlined in this policy. Maintenance purchases will be tracked on an ongoing basis and reported to the Sustainable Facilities Manager on an annual basis to ensure that sustainable purchasing goals are being met. Maintenance waste will be tracked on an ongoing basis and reported to the Sustainable Facilities Manager on an ongoing basis to ensure that diversion goals are being met.

HISTORY – <u>PROCEDURE</u> REVISION RECORD

MM/DD/YYYY-	
MM/DD/YYYY – Revision	

RESPONSIBILITIES

Director and Assistant Directors of Facilities Planning, Design and Construction	 Overall implementation authority and accountability Ensure that contracting documents (RFPs, Specifications) are consistent with policy procedures Ensure that contractors are aware and maintain compliance Ensure procedures are followed by internal project managers (for renovations) and the Sustainable Facilities Manager (for maintenance)
Sustainable Facilities Manager	 Tracking and documentation; collect waste and waste diversion data from project managers
Project Managers	 Ensure compliance with (1) materials selection, (2) materials repurpose or disposal, and (3) indoor air quality management plan. Collect and share waste and waste diversion data for renovation projects
Office of Sustainability and Purchasing Office	 Share awareness and educational resources about New York State's green purchasing mandates (Executive Order #4) throughout the College. Educate relevant decision makers about available green product and services specifications and resources. Offer support and training resources (as needed) to help with the implementation of this policy across departments.

HISTORY - <u>POLICY</u> REVISION RECORD

MM/DD/YYYY – Policy Implementation	
MM/DD/YYYY - Campus Comment	
01/2020 - 02/2020 - Reformatting	Sustainability Office
11/2019 - 12/2020 - Revisions	Sustainability Office, Facilities, and Business Office
07/2019 - 09/2019 - Initial Development	Sustainability Office, Facilities