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## Low-Impact Site and Green Building Exterior Management Plan (Policies for a Green and Sustainable Campus)

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It is SUNY ESF's intent to encourage management practices relative to campus and building grounds, site and building exteriors that have the lowest environmental impact possible and preserve ecological integrity, enhance diversity and protect wildlife while supporting building performance and integration into surrounding landscapes. In support of this intent, the following practices will be followed:

### 1. Maintenance Equipment

- a. All maintenance equipment shall be maintained and used in proper operating condition. Malfunctioning equipment will not be used until it is repaired and in normal operating condition. Abnormal operating conditions include, but are not limited to: leaking oil, excess exhaust emissions, excess noise that may result from faulty exhaust systems, other leaking fluids (hydraulic, coolants, grease, fuels, etc.).
- b. Maintenance equipment shall be used in a manner consistent with its operating instructions/manuals.
- c. Operators of loud equipment shall wear suitable hearing protection during equipment operation and shall avoid operation of such equipment in the proximity of unprotected campus personnel where they may be exposed to potentially harmful noise. Threshold dB levels for hearing protection are subject to the determination of the College's Environmental Health and Safety Officer.
- d. Maintenance equipment operators shall avoid the use of equipment that generates exhaust fumes where those fumes may be ingested into building air intakes. Where this is not possible anything more than "incidental" work shall be controlled by one of the following methods:
  - i. Arrange for air handling units /building air intakes to be temporarily turned off (where such action does not present a threat to Indoor Air Quality).
  - ii. Schedule the work to occur when the building is normally unoccupied.
  - iii. Where neither "a" or "b" are possible or practical, notify building occupants of the potential for fume ingestion, so that they may have the opportunity to relocate during the work.
- e. Maintenance equipment shall be used in such a manner as to avoid unnecessary soil compaction. Loads imposed by heavy equipment shall be spread with boards and plywood whenever possible. Compacted topsoil will be remediated through scarification or plug aeration when necessary.

### 2. Plants

- a. Only plant species native or naturalized to New York State and/or the northeast United States will be planted in the future on the SUNY ESF campus.
  - i. New plantings as well as replacement plantings shall be selected from those species identified in *Native Plants of the Northeast: A Guide for Gardening and Conservation* (Leopold D.J. 2005. Timber Press, Portland, OR) or *Trees of New York. Native and Naturalized* (Leopold, D.J. 2003 Syracuse University Press, Syracuse, NY).

- b. Plantings shall be selected as appropriate for microclimatic and soil conditions in order to give the best probability for survival, vigorous growth and health. Preference should be given to those species that:
  - i. limit the need for irrigation, fertilization and significant maintenance.
  - ii. provide habitat for desirable wildlife.
  - iii. support the educational mission of the College.
  - iv. support environmentally conscious design decisions by:
    1. providing shading of buildings and/or surface structures (for natural cooling and to minimize the “heat islands effect”).
    2. assisting in the control of wind.
    3. minimizing the intake of pollens and vegetated litter into building air intakes.
  - v. Planting selections, whenever possible shall be reviewed and approved by campus experts (dendrologists and/or landscape architects from the Department of Environmental and Forest Biology and the Department of Landscape Architecture).
3. Animal and Vegetation Pest Control
  - a. It is SUNY ESF’s intent to minimize the risk of exposure of campus users (students, staff, faculty and visitors) to toxic chemicals that may be used in the control of animal, insect and vegetation pests. This will be achieved through an internal approval process intended to prohibit the use of toxic chemicals whenever options for alternate means of control are available.
  - b. Only properly trained and licensed applicators may use pesticides (including herbicides) on the SUNY ESF campus. Pesticides may only be used in accordance with the manufacturers’ written application instructions. The Vice President for Administration, in consultation with the campus Environmental Health and Safety Officer, shall approve the application of pesticides jointly with the Director of Physical Plant. Such approval shall only occur where effective non-chemical treatments are unavailable. Such treatments shall include but are not limited to:
    - i. Animal Pest Control:
      1. Trap and release.
      2. Physical deterrents (nix-a-lite, bird netting, ultrasonic harassment, etc.).
      3. Products with natural deterrents (borax, soap sprays, etc.)
      4. Integrated pest management techniques.
    - ii. Plant Pest Control:
      1. Hand weeding.
      2. Water/light deprivation.
      3. Integrated pest management techniques.
  - c. Animal pests effecting buildings and/or grounds will be controlled by non-lethal trap-and-release and/or physical deterrents whenever appropriate (ground hogs, squirrels, pigeons, vermin, rodents, bats, etc.). Building vermin infestations may be controlled with lethal spring traps, glue pads or similar products without pre-approval where non-lethal means have proven to be ineffective.
  - d. Application of pesticides will be scheduled and conducted at such times that the possibility of exposure to campus users will be limited.. Where pesticide use may affect campus personnel, they will be afforded prior notification of the impending activity.

4. Landscape Waste

- a. Landscape waste will not be sent to landfills. Landscape waste will be returned to the environment to decompose naturally. Areas are set aside at SUNY ESF's Experimental Field Station (Lafayette Rd., Syracuse) and at the Syracuse University (SU) South Campus for this purpose. SUNY ESF, with the permission of Syracuse University's Grounds Manager, may utilize SU's disposal site. Landscape waste that is not suitable for these locations may be transported to a public composting site operated by the Onondaga County Resource Recovery Agency (OCRRA).
- b. Lawn clippings will generally be left in place on lawns to decompose and naturally fertilize those areas.
- c. Landscape waste will be used to mulch campus planting beds in lieu of being moved to off-site locations for decomposition, whenever possible.

5. Irrigation Management

- a. SUNY ESF does not normally irrigate lawns or other landscaped areas. Irrigation is generally limited to flowering annuals in planters and new plantings for the establishment of health root systems. Such irrigation, to the extent that it is done, is done manually, so that no more water is used than necessary.
- b. Plant beds will be mulched with organic material to retain moisture in the soil and minimize the need for irrigation. Landscape plantings and materials are to be selected to minimize or eliminate the need for irrigation.
- c. Irrigation of lawns and landscaped areas may only be considered in extreme and unusual conditions where necessary to assure the survival of the vegetation assets under drought conditions.
- d. Irrigation of vegetation used in research or for research purposes is not subject to this policy.

6. Fertilizer Use

- a. The use of fertilizers for lawns and landscaped areas will generally not be used unless necessary. Fertilizers shall be applied in strict accordance with manufacturers' application instructions. The use of fertilizers shall be warranted only by visual distress of plants and vegetation and the application dosage confirmed by soil testing and analysis. Organic fertilizers will be used in lieu of chemical fertilizers whenever possible.

7. Snow Removal

- a. Snow-melting chemicals shall not be used as a replacement to physical removal of snow by shoveling and/or sweeping. Wherever possible surfaces will be exposed to the sun to aid in natural snow melting and evaporation. Snow-melting chemicals shall be used only when necessary to ensure the safety of campus and building users to prevent the build-up of ice on exterior streets, walkways and stairway surfaces. Snow-melting chemicals will be used in accordance with the manufacturers' application instructions in quantities only adequate to make them effective. Chemicals used will be selected to limit their impact upon the environment as well as upon constructed surfaces. Preference will be given to those chemicals identified as least toxic to vegetation.

8. Cleaning of Buildings Exteriors

- a. Building exteriors are generally not cleaned at SUNY ESF. Where exterior masonry surfaces warrant cleaning, the preferred method is to soak with a water spray and physically brush the surface to remove surface contaminants.
- b. Window washing shall be done manually, using cleaning products that are Green Seal® approved (see also MR Credit 4 and IEQ Credit 10 documentation). Exterior window washing, above the ground floor level, is generally limited to no more than one cleaning per year.
- c. Roof surfaces are not cleaned except to prevent the accumulation of debris in roof drains. Such cleaning is typically to be done by broom or collection of debris by hand.

9. Paints and Sealants

- a. It is the policy of SUNY ESF to optimize the use of Indoor Air Quality Compliant Products, including paints with volatile organic compound (VOC) emissions that do not exceed the VOC and chemical component limits of Green Seal's Standard GS-11 requirements and sealants that do not exceed the VOC and chemical component limits of South Coast Air Quality Management District Rule #1168 (see also MR Credit 3 documentation). Paints and sealants used for exterior applications will meet these requirements whenever those products are found to be durable and suitable for the application. Non-compliant products may be considered and used where, taking durability into account, the subsequent need for re-coating or replacement is anticipated to minimize the amount of VOC released into the atmosphere in the long run. When using the higher VOC products, precautions are to be taken to prevent the ingestion of fumes into building intakes and receptors, so as not to adversely affect indoor air quality.

10. Other Maintenance of Building Exteriors

- a. Building exteriors will be maintained in good condition so as to minimize the potential for:
  - i. water infiltration (potential for structural damage, mold growth, etc.).
  - ii. leaching or washing of toxic substances from damaged surfaces onto adjacent grounds (such as from flaking lead paint, asbestos, etc.).
  - iii. harboring of insects and/or vermin.
- b. Replacement materials for building exteriors will be selected for their durability, insulating value, local manufacture and availability, recycled content and to minimize the use of materials that contain products or are manufactured in such a way as to harm the environment.

Accepted on behalf of the  
State University of New York  
College of Environmental Science and Forestry

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

