



WAKE FOREST

UNIVERSITY

Contractor Safety Guide

Developed by: Department of Environmental Health and Safety

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I. Purpose

The purpose of this guide is to provide contractors of Wake Forest University (WFU) and its ancillary properties a clear and concise understanding of the expectations for regulatory compliance while conducting work. Contracted work shall not interfere with the health and safety of University faculty, staff, students, and environment. Contractors are responsible for conducting their work in a safe and compliant manner that ultimately minimizes environmental and safety risk to the University and surrounding community. Best Management Practices are encouraged of contractors while conducting work on University owned and leased properties.

II. Objective

This guide is intended to provide contractors an understanding of WFU requirements and expectations while conducting work at the University. Contractors have a responsibility to protect the environment and the health and safety of faculty, staff, students and visitors to the University. Contractors are encouraged to build a partnership with University contacts in order to maintain compliance with all federal, state, and local safety and environmental regulations.

III. Scope

This guide applies to any contract service that has a potential to impact the health and safety of University occupants and environment. Examples of these contract services / contractors include, but are not limited to:

- General Contractors and Subcontractors with construction responsibilities such as; new construction, trenching and excavation, renovating, roofing, and installation of electrical, plumbing, HVAC, and fire suppression systems,
- Indoor and Outdoor Surface Cleaning, Treatment, and Coating,
- Service Contractors responsible for Elevator Maintenance, Chilled Water and Cooling Towers Maintenance, Electrical, Refrigerant, and Landscape / Turf Management,
- Waste Removal from compactors and grease traps, as well as collection and removal of used oil and hazardous waste.

IV. Responsibilities

a. Contractors

Contractors are responsible to review this guide and adhere to the requirements as they pertain to the work being contracted. It is the responsibility of the contracting entity to ensure that its employees and subcontractors are aware of the University's safety and environmental guidelines. The employees of contracting entities are required to watch the Contractor Safety Orientation Video prior to conducting work at the University.

Contractors are responsible for providing all required documentation related to health, safety and the environment to the University's project manager. This documentation includes Health and Safety Plans specific to the work being conducted, SDSs (Safety Data Sheets) for chemicals used or stored, Fall Protection Plans if work is being conducted at elevated heights, and training records for contract employees conducting confined space entry and rescue. Other documentation may be requested from the contractor.

Prior to beginning the contracted service, the Contractor Safety Agreement Form must be completed and submitted to the Project Manager at the University. This agreement between WFU Project Manager and the contractor will be maintained in the Project Manager's Project File. The Contractor Safety Agreement Form is available on the WFU EHS website. If contractor service is repeated over a set timeframe (i.e. painting, pest control, elevator maintenance, or mold abatement) the contractor is responsible to submit a completed Contractor Safety Agreement Form and all other requested forms or plans for the entire service period. If new hazards are introduced during service due to addition of chemical products, fall potentials, or any other hazard that have the potential to exist or result from contractor activities, the contractor and Project Manager are responsible to ensure that amendments be made to the Contractor Safety Agreement Form and update health and safety plans to address new hazards. Amended agreements and health and safety plans must be submitted as soon as possible. The Project Manager is responsible to ensure that all forms and plans are submitted promptly before work begins.

Contractors and subcontractors are responsible for identifying the health, safety and environmental impacts of their work. All personal protective equipment (PPE) and rescue equipment required either by OSHA (Occupational Safety and Health Administration) or WFU's EHS policies and programs, must be provided by the contractor. Contractors are also responsible for providing air monitoring or other environmental or personal monitoring devices as required.

Contract employees must be trained prior to working at the University. It is the contractor's responsibility to ensure their employees are adequately trained as required and are competent to conduct the work safely. Training records must be made available upon request.

If unsafe conditions arise during the course of work, it is the contractor's responsibility to stop the work and alert employees of the unsafe condition, moving employees from the area if necessary. The contractor will inform the project manager of the unsafe condition, review internal programs for deficiency, coordinate with project manager to correct the deficiency, and correct the deficiency. If contract employees engage in unsafe behavior the contractor is responsible to identify and correct the behavior.

Incidents that result in injury, property damage, and / or harm to environment must be reported to the project manager immediately. For medical emergencies dial 911. Utilize *Incident Reporting Form* available on the WFU EHS website.

b. Project Managers

WFU Project Managers are responsible for providing contractors with a copy of this guide and in coordinating all questions, concerns, and inquiries that relate to environmental, health, and safety to WFU EHS. The Contractor Safety Agreement Form must be signed by the contractor and Project Manager prior to beginning of work. Once signed, Project Managers are responsible to maintain the form in the job file and submit a copy to EHS.

If required documentation or additional information from contractor is needed in order to define safe work plans, EHS will ask Project Manager to help with contacting the responsible party and holding off on start date until all documentation and information are submitted to EHS.

The Project Manager is responsible for addressing unsafe or harmful behavior engaged in by contractor or contractor's employees. **If unsafe behavior continues the Project Manager will be responsible for contacting the contractor and reporting the unsafe conditions or behavior. Unsafe, unhealthy, or environmentally harmful performance by the contractor may result in delay of payment for services and result in permanent loss of business at the University. The Project Manager is also responsible to contact University Procurement Services of the issue.**

If unsafe conditions exist or have the potential to exist, the Project Manager is responsible in ensuring the contractor is aware of the hazard. Project Managers must ensure that contractors are held accountable for unsafe actions and behaviors and for providing safe conditions for others while work is being conducted.

Safety within and the surrounding work area must be maintained. Project Managers are responsible to coordinate with all parties involved to initiate best management practices in the work area that will reduce risk of hazards.

Reports of incidents resulting in injury, property damages, or harm to the environment must be reported to EHS. Project Managers will be responsible to notify EHS of the incident and also ensure that contractors utilize *Incident Reporting Form*.

c. Procurement Services

Before contractors can be awarded work at WFU or ancillary entities such as Athletics, Real Estate, Graylyn, and Reynolda House, this guide must be provided to each contractor. The guide is available either at the EHS Website or hardcopy.

Once contractors have been awarded the work, if health and safety issues are observed the Project Manager and / or EHS will notify Procurement Services of the unsafe behavior or conditions as they are identified. Procurement Services will participate in a review with Project Manager and EHS of reported unsafe behavior or incidents of the contractor.

d. Environmental Health and Safety

Environmental Health and Safety coordinates with responsible parties within the University to develop, implement, and maintain the contractor safety guide for the University. EHS will review this guide for effectiveness and make changes as necessary to ensure ongoing safety of faculty, staff, students and visitors.

EHS may conduct unannounced observations during contractors' services and will note any deficiencies in work practice that may result in unsafe conditions. EHS will inform the contractor and Project Manager of the deficiency. If there is risk of immediate injury or death, EHS will instruct the contractor to stop work and not resume until the hazard has been eliminated or workers are protected from the hazard.

In the event that the contractor does not comply, EHS will contact the Project Manager for the postponement of work until compliance is in place or request termination of service if negligent or willful noncompliance continues. Violation of safety and environmental regulations may result in the permanent removal of the contractor or their employees from WFU premises.

EHS will review health and safety plans, as well as other documentation to ensure regulatory compliance.

V. Occupational Health, Safety, and Environmental Guidelines

a. Emergency Plans and First Aid

Contractors are responsible to provide emergency resources to their employees such as first aid kits, confined space rescue equipment and training, self-rescue training and equipment for high angle work, fire extinguishers, chemical and petroleum clean up kits, and a detailed Emergency Response Plan for the job. Contract employees must be informed of necessary steps to take in the event of an emergency while working at the University.

In the event of an emergency requiring police, fire, or ambulance, immediately call 911. After calling 911, the Project Manager must be informed of the emergency. University Police will be notified through the 911 system and will respond to the emergency. In the event of a serious work related injury that requires medical attention from an emergency room or requires hospitalization, notification to the Project Manager and EHS must be done as soon as possible.

b. Hazard Communication

All chemical products used in contractor operations must be managed in accordance to OSHA's Hazard Communication Standard. Inventory of products must be made available to EHS and / or

regulatory agencies as requested. All chemical products used and stored must have a SDS and be accessible to users, EHS, or occupants if requested.

Storage of the chemical products must follow OSHA, NFPA (National Fire Protection Association), and EPA (Environmental Protection Agency) guidelines. All secondary containers must be compatible with the contents, closed when not in use, and labeled with the contents.

Contractor's unused chemical products are to be removed from University property by the contractor. Under no circumstances are contractor's permitted to leave behind unused chemical products unless it is specifically identified within the contract. Chemical products left on site by contractors without permission will be shipped to the contractor's address by common carrier, and shipping and handling charges will be subtracted from contractor's invoice.

c. Chemical Waste and Disposal

Chemical disposal is the responsibility of the contractor. Absolutely no chemical waste may be discarded in general trash or poured down the sinks or storm drains. This includes aerosol cans. In the event of chemical waste generation, contractors are responsible to inform the Project Manager and / or EHS. All regulatory requirements such as containment, labeling, storage, and spill clean-up materials for chemical waste are the responsibility of the contractor.

d. Nonhazardous Waste Management

Generated waste that is not categorized by EPA as hazardous waste must be collected and managed properly for disposal or recycling. The following are general waste streams and preferred management practices:

Waste Type	Disposal or Recycling
Used Oil	Recycle
Fluorescent Bulbs	Recycle
E-Waste (electronics, computers, etc)	Recycle
Metals / White Goods	Recycle
Packaging & Pallets	Recycle
Scrap Wood	Recycle
Building Materials	Recycle and / or Disposal as advised by Prj Mgr
Landscape Debris / Wood	Prj Mgr will advise on correct method

Contractors are responsible to develop a waste management plan in coordination with the Project Manager. All waste generated in contractor operations will be managed by the contractor. Rental of construction dumpsters from a certified waste company is necessary if the project requires and the coordination is the contractor responsibility. Waste and recycling items must

remain segregated and managed properly. Waste and recyclables must be removed from campus in a timely and neat manner. Neither wastes nor recyclables can be left in an untidy fashion or outside of collection containers.

Waste disposal and recycling records must be submitted to the Project Manager for The Office of Waste Reduction and Surplus Property. Electronic waste must be disposed of by a certified electronics recycling company. The chain of custody report from recycler needs to be forwarded to the Project Manager. The Project Manager will forward on to The Office of Waste Reduction and Surplus Property.

Coordination of reusable items and storage, such as: furniture, fixtures, equipment, etc. must be coordinated through The Office of Waste Reduction and Surplus Property. Contractor is responsible for collection and removal of all packaging and pallets from deliveries of materials. Any further questions about waste management at WFU should be directed to The Office of Waste Reduction and Surplus Property.

e. Bulk Storage Containers

Bulk storage containers that are 50 gallons or greater require secondary containment to prevent spills from entering floor drains, soil, storm water, or ground water. Contractor supplied clean up kits must be made available and used in the event of discharge. All releases to the environment, no matter how small, must be reported to Project Manager promptly. Utilize *Incident Reporting Form*. Clean up materials and waste disposal is the responsibility of contractor.

f. PPE (Personal Protective Equipment)

In the event that contract employees are required to wear PPE, the contractor is responsible to provide the PPE and enforce compliance with proper use and disposal.

g. Fire Safety

All contractors and subcontractors shall adhere to the requirements of the NC Fire Code and all applicable NFPA (National Fire Protection Agency) standards.

Any contractor activity involving life safety equipment such as fire alarm systems/devices, sprinklers, suppression systems, etc., must first be coordinated with the fire prevention program coordinator or his designee(s).

Contractors must maintain egress at all times, including paths of travel, exit access, exits and exit discharge.

Contractors must take precautions to prevent false alarms and protect smoke detectors and other fire alarm devices during work activities.

Any activity involving the covering of smoke detectors or, the removal of any fire alarm devices, due to work being performed, must apply for an impairment form 24 hours in advance.

Impairment forms are submitted to the fire prevention program coordinator. Contractor is responsible for posting fire watch in areas of a building where devices are impaired.

Activities involving the use of gas powered equipment are not allowed inside of buildings and asphalt tar kettles and pots shall not be used inside or on the roof of a building or structure.

Contractors must maintain fire department access to structure or buildings during work activities.

h. Confined Space Entry

All contractor activity within a permitted confined space must be approved by WFU Utilities Operations or EHS prior to the entry. Approval for entry will be granted based on the following:

- Personnel are trained in permitted confined space and rescue procedures. Training certifications must be available upon request.
- Trained rescue team must be provided by the contractor. WFU is not responsible for providing rescue to contractors or their employees.
- Rescue equipment must be readily accessible.
- Personal Protective Equipment must be worn during the entry, including fall protection equipment, if necessary.
- Adequate number of personnel must be present for the entry and for rescue.
- Existing or potential hazards are minimized to protect all entrants.
- Prior to entry, initial air readings must be conducted and documented.
- Continuous air monitoring must be conducted during confined space entry and documented on the permit at least every 15 minutes.

i. Electrical Safety

Employees must be trained and competent in their assigned tasks for protection of themselves and others in the work area. All tools, clothing, and procedures must be in compliance with safety and fire safety regulations.

j. Lock-Out Tag-Out

Lock-Out Tag-Out (LOTO) must be performed by contract employees on energized equipment prior to beginning work on equipment. Contract employees must follow OSHA requirements for individual and group LOTO. If energized equipment or systems must be worked on and LOTO is not an option, approval must be granted by AVP of Facilities and Campus Services. The contractor is responsible to report the need for work on energized equipment / systems to the project manager before the energized work can begin. The project manager will coordinate with F&CS Maintenance and Utilities and the contractor.

k. Machine Guarding and Use

All machines / equipment used in contractor operations must be in compliance with manufacturer's specifications for guarding and use. Powered equipment must be UL approved and listed with the UL sticker affixed from the manufacturer.

l. Fall Protection

Contractors are required to have their own Fall Protection Plan when working at elevated heights of 6 feet or greater. The plan must be submitted to the project manager prior to work beginning for review. The plan must include all elements and criteria as required by the OSHA Standard for Fall Protection. Personal Protection Equipment such as full body harnesses must be made available and worn by the contract employees when working at elevated heights. This includes work conducted within a bucket truck or lift, scaffolding, and roof work. Protective barriers must be established and in place to prevent entrance beneath the working area.

m. Silica Dust

All contract operations that generate dust from the cutting of concrete must be done in accordance to OSHA regulations. All attempts to eliminate the generation of dust are required. Wet cutting is the preferred method of cutting concrete. If not possible, the activity must be conducted in a manner and timing of day where exposure to dust is minimized. Contractor employees involved in cutting concrete without a wet saw must wear appropriate respiratory protection and be enrolled in the contractor's respiratory protection program.

n. Offloading of Concrete Trucks

The project manager will appoint a designated area for concrete trucks to offload and rinse out concrete. Concrete is not allowed to be poured in storm drains or creeks.

o. Trenching and Excavation

All trenching and excavation must be conducted in a manner to protect not only the workers but individuals in nearby work zones. Protective barriers must be established and in place to prevent unauthorized persons from access. Trenching and excavation operations must be in compliance with OSHA regulations. Soil piles must be protected from rain events to prevent washout and mud from entering storm drains. Erosion control measures are required and permits must be obtained from City as applicable.

p. Use of Gas Cylinders

Gas cylinders must be secured to prevent tip over. All gas cylinders must be in compliance with OSHA regulations. Inventory of gas cylinders needs to be maintained and available to EHS as requested. Gas cylinders must be inspected by the contractor. Record of inspections must be maintained onsite and available upon request. Cylinders must be in safe condition and equipped with a relief device. Cylinders are to be secured at all times to prevent tip-over.

q. Welding, Cutting, and Brazing Operations

Hot work permits are required for welding, cutting, and brazing operations. The permits can be downloaded off the EHS website or can be obtained from project manager or EHS. Completed hot work permits must be submitted to EHS for review and record retention.

Contract employees must wear proper personal protective equipment while conducting welding, cutting, and brazing operations. Fire hazards must be eliminated before work begins. If flammable / combustible materials exist in the work zone, all precautions must be in place to prevent a fire. Guards / screens must be used to confine heat, sparks, and slag. Floor openings or cracks, holes in walls, and open ducts must be protected to prevent sparks from falling through and igniting any materials below.

Fire extinguishers must be at the job site and a fire watch must be posted.

In areas where flammables or explosive atmospheres exist or have potential to exist, either the hazard must be removed prior to operations or operations must be conducted at least 50 feet away from the existing hazard.

1. Hot Work Permits

Hot work permits can be obtained from the EHS Website or through project management. Completed hot work permits must be submitted to EHS for review and record retention.

r. Ladders

Ladder use must be compliant with OSHA's Ladder requirements. Ladders may only be used for their intended purpose. No alterations or modifications to ladders are allowed. If ladders become damaged, they are to be discarded and not used. Contract employees are responsible to inspect ladders prior to use to ensure they are safe to use.

s. Vehicle Safety

Extra caution must be exercised when operating a vehicle on campus due to the large volume of pedestrian traffic. Campus speed limits are to be obeyed at all times. Riding on tailgates or in the bed of pickup trucks are not permissible. Vehicle accidents must be reported to University Police and project manager, even if the contractor is not at fault.

t. Heavy Equipment

Operators of heavy equipment must be trained and deemed competent by the contractor. Contractors are not authorized to operate University owned equipment without prior approval from project manager. Equipment use is to be conducted in a manner as the equipment is designed for.

u. Asbestos Management and Abatement

The University has an Asbestos Management Program and policy. Contractors who work in areas where there is a potential for ACM (asbestos containing materials) to be present, are

required to be trained on the OSHA regulatory requirements for asbestos protection for the worker. Before any building material is disturbed, it must be surveyed and may require testing to determine if ACM is present. The University has certified asbestos inspectors to conduct the survey and retrieve samples as necessary.

If the materials are ACM and abatement is necessary, the abatement contractor must be an approved contractor by the University and a state certified abatement contractor. EHS will assist the Project Manager with contractor selection. After the abatement has taken place, the contractor work cannot take place until the University's Air Monitoring Supervisor gives clearance based on the last round of air sampling events. The University's Air Monitoring Supervisor will contact the Project Manager and EHS of the results of the last air sampling events.

The University's *Asbestos Management Policy* is located on the EHS website at: <http://ehs.wfu.edu/files/2014/08/ehs-asbestos-528.pdf>.

v. Mold Abatement

Mold abatement must be in accordance to the University's *Mold Management Plan* (<http://ehs.wfu.edu/files/2014/08/ehs-mold-plan.pdf>). Chemical products used during the abatement must be reviewed and approved by EHS prior to usage.

w. Lead Abatement

In the event that painted surfaces will be disturbed by sanding, cutting, grinding, etc., the painted area must be evaluated prior to work to determine if surface is free of lead paint / coatings. If there is no documentation in EHS files of abatement or prior testing, the coating must be tested for lead concentration. The sample must be taken in accordance to NCDENR (North Carolina Department of Environment and Natural Resources) and EPA regulations.

If the sample results demonstrate a concentration at or above **0.5 percent lead by weight**, the contractor must be a certified lead abatement professional to perform work. All lead abatement work must be done in accordance with 29 CFR 1926.62 Lead in Construction Standard.

The HUD Guidelines consider lead levels of 0.5 percent lead by weight (AA analysis) or greater as lead-based paint which may be a potential hazard. In 1978, the Consumer Product Safety Commission (CPSC) banned lead-containing paint containing greater than 0.06% lead in residential paint. As a result, the congressionally established definition of "lead-based paint" under the Lead Based Poison Prevention Act (0.06%) automatically became effective. In addition to lead content of paint, current OSHA regulations (e.g. 29 CFR 1926.62 Lead in Construction Standard) apply to all construction work where an employee may be occupationally exposed to lead. Therefore, any work performed on a surface containing any amount of lead must comply with this regulation.

The Project Manager is required to notify EHS of this work prior to abatement or encapsulation.

x. Pesticide Application

Pesticide applicators must be licensed in North Carolina as a pesticide applicator in the appropriate pesticide classification for the application they are performing or working under the direct supervision of someone who is licensed as such. Signage shall be posted as required by Federal, State and Local laws to inform persons of entry restrictions. In areas where contact to herbicides or pesticides are possible, immediately following the application, the area needs to be secure from faculty, staff, and students for their safety until process drying time is reached. For example, with lawn spraying, the area needs to be secured from pedestrians and also, with signage, until the product has dried and is no threat to anyone who may come into contact with the product.

All Federal, State and Local laws must be followed at all times. For questions regarding current regulations please refer to:

NCDA&CS Structural Pest Control & Pesticide Division
Mailing Address: 1090 Mail Service Center, Raleigh, NC 27699-1090
Physical Address: 2109 Blue Ridge Rd., Raleigh, NC 27607
Phone: (919) 733-3556 ; FAX: (919) 733-9796

All pesticides shall be reviewed and approved prior to use on campus by the Wake Forest University Department of Environmental Health and Safety. A current product label and current MSDS must be submitted for approval. Application records must be made available to the project manager after each application.

Landscaping Services must be notified prior to any applications on campus or other property owned by Wake Forest University. A 24 hour notice is preferred.

Wake Forest University uses an integrated pest management and best management practices to minimize unnecessary pesticide use and expects all contractors to do the same while working on any University owned property. Whenever possible the least toxic chemical available to do the intended job should be used.

Pesticide applicators must be North Carolina certified and or licensed applicators. Copies of certification / license must be available upon request.

y. Arborist Operations

All tree care operations shall comply with ANSI Z133 for pruning, trimming, repairing, maintaining, and removing trees, and cutting brush safety requirements. All pedestrian traffic in and around the work area must be redirected away from work area. The contractor is responsible to redirect pedestrian and automotive traffic away from job site. Signage, cones, and security tape must be used.

z. Storm Water Protection

All outdoor operations that have a potential to impact storm water must be conducted with extreme care. Prior to work being conducted, the contractor is responsible to develop and practice best management techniques to ensure that no discharge of pollutants enter the storm drainage system.

VI. Severe Weather Guidelines

In the event of inclement weather, WFU has developed guidelines for the campus community. These guidelines are available on the WFU website at <http://inside.wfu.edu/2014/04/severe-weather-guidelines-for-wake-forest/>. All work at elevated heights such as working on ladders, scaffolding, bucket trucks, roof tops, etc., must cease if there is a potential for high winds and / or lightning strikes. Work may resume when weather conditions improve and do not cause an unsafe working environment. All tunnel work is to be postponed in the event of lightning.

VII. Housekeeping

Housekeeping of contractor jobsite is the contractor's responsibility. The job site must remain clean and orderly as much as possible during and after the work is complete. Dust, odor, and noise pollution must be controlled as much as possible. It is highly suggested that contractors assign personnel to monitor housekeeping conditions of their work area throughout the entire work shift.

VIII. Safe Work Distances

Contractors are responsible to establish and enforce safe work distances. Boundaries must be established to protect the campus community from harm near the work sites. Fencing, caution and danger warnings must be posted, and all barriers need to be maintained to protect the worker and eliminate entry of non-designated persons in the work area. Safe work distances include working at elevated heights. The contractor is responsible to ensure that protective measures are in place for the potentials for tool and material drops from heights will not come into contact with pedestrian or workers below.

If there are any questions with this guide, please contact the Project Manager of the contract or the Department of Environmental Health and Safety. EHS staff can be reached by: wfuehs@wfu.edu or call 336-758-3427.