

Northwestern
Contractor Safety
Environmental Health and Safety

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I. Purpose

This program establishes minimum guidelines for safety and accident prevention during contractor activities at Northwestern University, in accordance with the Northwestern [Environmental Health and Safety \(EHS\) Policy](#) and associated [EHS programs](#).

II. Scope

- A. For the purposes of this program, the term “Contractor”:
 - i. Is to be construed liberally to apply to all vendors and service providers who perform the aforementioned activities.
 - ii. Does not apply to subcontractors; however, contractors retain responsibility for any subcontractors.
- B. For the purposes of this program, the term “Project Manager” is defined as the contractor’s main point of contact at Northwestern for the work being performed (e.g., Northwestern Chief Engineer, Chief Electrician, Project Manager, Building Manager, other University Representative).
- C. This program applies to all contractors who perform construction, renovation, maintenance, repair, and other similar activities on behalf of Northwestern that include but are not limited to: plumbing; electrical; carpentry; landscaping; telecommunications; recycling; event setups such as tents, food, and audio/video equipment; pyrotechnics; elevator repair and maintenance; window washing; roofing; machinery/equipment installation or removal; crane and helicopter operations; hot work (e.g., welding); utility plant services; heating, ventilation, and air conditioning work; custodial services; painting; pest control; hazardous material activities (e.g., asbestos abatement, lead-based paint stabilization, crystalline silica); hazardous and universal waste handling and disposal; survey and investigation activities; and other similar activities.

III. Responsibilities

A. Contractors

- i. Adhere to the requirements of this program.
- ii. Ensure subcontractors adhere to the requirements of this program.
- iii. Retain primary responsibility for the safety of their worksites, employees, and the safety of any Northwestern staff, faculty, students, or visitors they may come in contact with.
- iv. Accountable for regulatory compliance, implementing effective safety programs, adequate training, and adherence to all reporting requirements.
- v. Responsible for following their own safety and health program and complying with all federal, state, and local laws, in addition to any site-specific requirements established by this program or Northwestern.
- vi. Coordinate all work with their Northwestern Project Manager.
- vii. Prohibited from unauthorized areas (e.g., laboratories, dormitory sleeping rooms) unless provided with the appropriate approval from Northwestern.
- viii. Provide a safety representative or designate an individual responsible for addressing worksite environmental health and safety concerns.
- ix. Depending on the nature of the work and potential hazards, and upon request, submit a plan detailing the scope of work to Northwestern for review.

- x. Ensure all employees have the proper knowledge and training (e.g., OSHA 10-hour or 30-hour, the general safety requirements for the project, as well as any task-, equipment-, vehicle-, or craft-specific training required) and access to the required personal protective equipment (PPE). Proof of training must be available upon request.
- xi. Provide their own trained personnel, tools, equipment, and vehicles to perform activities, except in extenuating circumstances, with the appropriate approval from Northwestern.
- xii. Ensure all tools, equipment, and vehicles utilized on campus are properly maintained, inspected, and used as intended, as required by regulatory standards and manufacturer guidelines.
- xiii. Promptly report all unexpected hazards, conditions, and incidents to the Northwestern Project Manager and the applicable regulatory agencies (e.g., OSHA), as necessary.
- xiv. Inform the Northwestern Project Manager upon completion of the work and restore worksites.

B. Northwestern Project Managers

- i. Adhere to the requirements of this program.
- ii. Promptly notify EHS of all contractor-related incidents, injuries, near misses, and unexpected hazards or conditions by email at ehs@northwestern.edu, utilizing the Northwestern [incident reporting portal](#), or any other effective means.
- iii. Coordinate contractor activities as necessary, including but not limited to equipment and system shutdowns, lockout/tagout, crane lifts, hot work permits, confined space entries, fire protection or detection system impairments, or any other tasks requiring authorization, safe operating procedures, permitting, support, or intervention.
- iv. Notify and collaborate with EHS to address environmental health and safety matters related to contractor activities (e.g., asbestos, lead-based paint, working at heights, confined spaces).
- v. Notify contractors of known hazardous conditions and provide site-specific information (e.g., confined spaces, asbestos testing results, utilities present, access restrictions).
- vi. Contact the laboratory representative when work involves contractor access to laboratory spaces to obtain hazard and access information, personal protective equipment requirements, and any other critical information to ensure the work can be performed safely.

C. Northwestern Environmental Health and Safety (EHS)

- i. Adhere to the requirements of this program.
- ii. Review and update this program, as necessary.
- iii. Collaborate with Northwestern Facilities, Project Managers, contractors, and others as necessary to facilitate activities including but not limited to equipment and system shutdowns, lockout/tagout, confined space entries, hazardous material sampling (e.g., asbestos, lead), fire protection or detection system impairments, or any other tasks requiring authorization, safe operating procedures, permitting, support, or intervention.
- iv. Provide guidance and technical assistance as needed, including assistance in reviewing and accepting contractor safety and work plans.

IV. General Requirements

A. Housekeeping

- i. Worksites, passageways, stairs, and doors must be maintained free of debris and hazards to allow for unobstructed egress at all times. When infeasible, interim measures must be established (e.g., signage, alternate exit routes).
- ii. Slip, trip, and fall hazards (e.g., liquids, cords) must be controlled or eliminated.
- iii. Separate and approved waste containers must be maintained for waste, oily and used rags, and other flammable or hazardous waste, and must be emptied regularly according to regulatory requirements.
- iv. At the completion of projects, remove all debris, materials, tools, and equipment and restore worksites.

B. Pandemic Safety Plans and Procedures

- i. During public health crises (e.g., COVID-19), develop project-specific safety plans and procedures that address guidelines and best practices provided by the Centers for Disease Control and Prevention (CDC) and OSHA, and are in accordance with any ordinances and executive orders set forth by federal, state, or city governments.
- ii. Plans and procedures must comply with applicable Northwestern policies or procedures and be implemented prior to the commencement of work.
- iii. Plans and procedures must be communicated to employees and any other affected personnel (e.g., subcontractors, Northwestern Project Managers, staff, faculty, students).

C. Site Safety

- i. Develop and implement a safety program applicable to the work being performed.
- ii. Establish and enforce site-specific safety measures and personal protective equipment (PPE) requirements for affected personnel, subcontractors, visitors, and Northwestern employees and students.
- iii. Prohibit unauthorized and unqualified individuals from worksites utilizing effective barricades, fencing, signage, attendants, and/or any additional measures at a safe distance from the worksite, as necessary.
- iv. Adhere to Northwestern site safety requirements (e.g., posted PPE signage), where applicable.
- v. Smoking, including the use of electronic cigarettes and vaping, is prohibited in Northwestern buildings, including buildings under renovation, and within 25 feet of building entrances, as well as in designated outdoor facilities.
- vi. Propping or leaving doors, windows, or hatches open in unattended worksites is prohibited.
- vii. Worksites must be secured to prevent unauthorized access when unattended (e.g., overnight, weekends).
- viii. On construction and renovation worksites (in addition to the requirements of this section):
 - a. An emergency action plan must be developed, implemented, and communicated to affected personnel.
 - b. A sign must be posted in a conspicuous location indicating the worksite safety representative's contact name and phone number.
 - c. Signage must be posted for PPE requirements, access restrictions, and

other relevant site safety and security requirements.

- d. An adequate amount of appropriately classed fire extinguishers must be readily available (e.g., A, B, C).

D. Stop-Work Authority

- i. Northwestern has the authority to stop work if unsafe acts or conditions are observed or suspected.
- ii. Contractors are required to stop working immediately if requested and must notify their Northwestern Project Manager upon such request.
- iii. Any corrective actions identified by Northwestern or others to address the issue(s) that initiated the stop-work order must be completed prior to resuming work.

V. Specific Requirements

The following specific requirements apply to contractors who are performing work related to any of the following categories:

A. Anti-Idling Ordinance

- i. Adhere to the City of Evanston [Anti-Idling Ordinance](#) while on the Evanston Campus.
- ii. Adhere to the City of Chicago [Anti-Idling Ordinance](#) while on the Chicago Campus.

B. Asbestos

- i. Notify the Northwestern Project Manager prior to any activities involving the disturbance or potential disturbance of known or presumed asbestos-containing materials.
- ii. Adhere to the Northwestern [Asbestos Management](#) program and applicable regulations (e.g., OSHA, EPA):
 - a. During sampling and abatement activities,
 - b. When service, maintenance, renovation, or construction activities have the potential to encounter or disturb asbestos-containing material (ACM) or presumed asbestos-containing material (PACM), and
 - c. Prior to renovation and demolition activities, which require a thorough asbestos inspection of either the whole building or the portion of the building that will be affected by renovation or demolition activities, regardless of the age of the building.

C. Confined Spaces

- i. Notify the Northwestern Project Manager prior to any activities involving confined spaces.
- ii. Must have a written program and permit system pursuant to OSHA regulations, and are expected to adhere to the Northwestern [Confined Spaces](#) program.
- iii. No confined space entry may be performed until EHS evaluates the space and identifies the hazards and control measures, and the appropriate safe operating procedures have been developed and approved by all parties involved, including EHS.
- iv. Notify the Northwestern Project Manager of the addition, removal, or change to confined spaces on Northwestern property.

D. Control of Hazardous Energy (Lockout/Tagout)

- i. Notify the Northwestern Project Manager if machines, equipment, utilities, or systems require isolation.
- ii. Coordinate all lockout/tagout activities with Northwestern Project Managers, Facilities, and others as necessary.
- iii. Adhere to the Northwestern [Control of Hazardous Energy \(Lockout/Tagout\)](#) program and OSHA regulations for all service, maintenance, repairs, and installations requiring the isolation and de-energization of hazardous energy sources.
- iv. Not permitted to shut down or start up machines, equipment, utilities, and systems unless approved by Northwestern.
- v. Group lockout/tagout requirements must be followed by all parties involved.

E. Cranes

- i. Notify the Northwestern Project Manager prior to crane operations on campus.
- ii. Crane operations must adhere to the applicable regulations (e.g., OSHA, ANSI).
- iii. Critical crane lift and logistics plans must meet the requirements of the Northwestern [Mobile Crane Critical Lift Operations Checklist](#) and be submitted to EHS for review. Critical crane lifts are defined as:
 - a. Hoisting loads 75% or more of the rated crane capacity,
 - b. 2 or more cranes required to perform a lift,
 - c. Movement of crane carriage with a load,
 - d. Use of personnel platforms,
 - e. Hoisting sensitive loads,
 - f. Hoisting loads over occupied buildings,
 - g. Hoisting loads outside construction areas, and
 - h. Work involving encroachment on a public right-of-way.

F. Dust and Odor Control

In the event activities may potentially create dust or odors that adversely affect contractor personnel or people in nearby or adjacent areas, contractors must:

- i. Evaluate the worksites, including any potentially impacted areas, and identify activities and conditions that will contribute to airborne particulates or odors.
- ii. Develop and implement an effective dust and/or odor control plan prior to the start of work, which must include control methods (e.g., water, ventilation, tools equipped with dust collection systems, sweeping compound, barriers).
- iii. Establish and implement the appropriate PPE requirements.
- iv. During the work, monitor the worksite and other impacted areas and modify control measures if found to be ineffective.
- v. Must have a crystalline silica exposure control plan in compliance with OSHA regulations when activities present potential exposure to crystalline silica.

G. Electrical

- i. Coordinate all electrical work with the Northwestern Project Manager, Northwestern Chief Electrician, or their designee, and others as necessary.
- ii. Must have an electrical safety program, applicable to the operation (e.g., installation, testing, repair, and maintenance of electrical equipment and systems) and in compliance with applicable standards and codes, including but not limited to city building and electrical codes, NFPA, OSHA, and Northwestern Facilities [Master Specifications](#), [Design Guidelines](#) and [Control of Hazardous Energy \(Lockout/Tagout\)](#) program.

- iii. All electrical work must be performed de-energized (i.e., no work on unguarded energized conductors and circuits) unless authorized by Northwestern, including EHS.
- iv. Exposed electrical circuits must not be left unattended.

H. Fall Protection

- i. Notify the Northwestern Project Manager prior to work at heights on campus.
- ii. Adhere to the Northwestern [Fall Protection](#) program and applicable regulations (e.g., OSHA, ANSI) when personnel are exposed to fall and falling object hazards (e.g., rooftops, platforms, scaffolding).
- iii. Establish and implement a fall protection plan, including rescue procedures, under the supervision of a competent person.
- iv. Provide adequate fall protection when workers are exposed to fall hazards such as guardrails, gates, covers, personal fall protection systems, lifelines, or other effective means to eliminate or reduce the hazard.
- v. Falling object prevention must be utilized, including, but not limited to, guardrails, toeboards, netting, PPE, and/or barricades.

I. Fire Detection and Protection System Impairments

- i. Notify the Northwestern Project Manager if any fire detection or protection system impairment is necessary.
- ii. Not authorized to impair existing sprinkler systems, fire detection or protection systems, fire pumps, special fire protection systems, or similar systems unless authorized by Northwestern.
- iii. Adhere to the Northwestern [Fire Protection System Impairments \(Red Tag\)](#) and [Fire Watch](#) programs during fire detection and protection system impairments, as necessary.
- iv. When possible, plan impairments when the building or affected area is not occupied.
- v. Hot work is prohibited while fire detection and protection systems are impaired unless approved by Northwestern, including EHS.

J. Fire Prevention

- i. General
 - a. Adhere to the Northwestern [Fire Prevention](#) program when activities have the potential to produce fire hazards.
 - b. If a fire prevention deficiency or hazard is identified by Northwestern or another authority (e.g., fire department), work must be stopped until the deficiency is addressed.
 - c. Debris must be removed daily and eliminated in all areas where there is no active sprinkler system.
 - d. Temporary heating devices
 - 1. Manufacturer guidelines must be followed.
 - 2. Must be located at least 10 feet from combustible materials (e.g., tarpaulins, canvas, similar coverings).
 - 3. Fresh air must be supplied in sufficient quantities to maintain the health and safety of workers and others in adjacent areas.
 - 4. Solid fuel salamanders are prohibited in buildings and scaffolds.
 - e. Rated wall, partition, and ceiling penetrations must be sealed with the appropriate fire stop sealant (reference the [Fire-Rated Wall and Floor/Ceiling Assembly Penetration Sealing Requirements](#)).

- ii. Welding, Cutting, and Brazing (Hot Work)
 - a. Notify the Northwestern Project Manager if hot work is required.
 - b. Adhere to the Northwestern [Welding, Cutting, and Brazing \(Hot Work\)](#) program and applicable regulations (e.g., OSHA, NFPA).
 - c. Hot work permits are required unless in designated hot work areas.
 - d. Adhere to hot work permit requirements, including but not limited to the use of a fire watch, fire extinguishers, removing combustibles, posting the permit at the worksite, and closing the permit upon completion.
 - e. For renovations or work on existing buildings, coordinate with the Northwestern Project Manager and Facilities to verify that fire detection and protection systems are operational and available.

K. Food Trucks

- i. Notify the Northwestern Project Manager prior to bringing any food trucks to campus.
- ii. Adhere to the Northwestern [Guidelines for Food Trucks](#).

L. Hazard Communication

- i. Adhere to the Northwestern [Hazard Communication](#) program, Safety Data Sheets (SDSs), and applicable regulations (e.g., OSHA, DOT) when handling, transporting, labeling, disposing of, and using hazardous materials on campus.
- ii. SDSs must be readily available for all hazardous materials at the worksite.

M. Hazardous Waste/Universal Waste

- i. Adhere to the Northwestern [Hazardous Waste](#) program and applicable regulations (e.g., EPA).
- ii. Responsible for all hazardous and universal waste on projects and worksites, including but not limited to the requirements for labeling, handling, storing, disposing of, permitting, and notifications, in accordance with applicable regulations.

N. Heat Illness Prevention

Adhere to the Northwestern [Heat Illness Prevention](#) program when personnel are exposed to heat hazards (e.g., utility tunnels, summer heat advisories).

O. Helicopters

- i. Notify the Northwestern Project Manager prior to any helicopter operations on or above campus property.
- ii. Adhere to the Northwestern [Helicopter Critical Lift Operations Checklist](#) and all applicable regulations (e.g., FAA, OSHA).

P. Lead

- i. Notify the Northwestern Project Manager prior to any activities that may disturb lead.
- ii. Painted surfaces in buildings built before 1978 must be assumed to contain lead.
- iii. Adhere to the Northwestern [Lead Management](#) program and the applicable regulations (e.g., OSHA, EPA) when:
 - a. Activities (e.g., demolition, maintenance, renovations) expose personnel or Northwestern community members to lead (e.g., lead-based paint), and
 - b. Removing and disposing of lead-containing materials from campus property.

Q. Material Handling Equipment

Adhere to the Northwestern [Material Handling Equipment](#) program and applicable regulations (e.g., OSHA) when operating material handling equipment (e.g., forklifts, hoists, cranes, powered pallet jacks, rigging equipment), including but not limited to inspections, maintenance, and training.

R. Mobile Elevated Work Platforms (MEWPs)

Adhere to the Northwestern [Mobile Elevated Work Platform](#) program and applicable regulations (e.g., OSHA, ANSI) when operating and riding in MEWPs (e.g., scissor lifts, boom lifts), including but not limited to inspections, maintenance, site risk assessments, rescue plans, and training.

S. Noise

When activities may create potentially hazardous or disruptive levels of noise that adversely affect personnel, including Northwestern community members in nearby or adjacent areas:

- i. Evaluate the worksite, including nearby and adjacent areas that may be impacted, and identify activities and conditions that will contribute to noise.
- ii. Develop and implement an effective noise control plan prior to the start of work to minimize hazards and disruptions.
- iii. During the work, monitor the worksite and other impacted areas and modify control measures if found to be ineffective.
- iv. Enroll personnel in an OSHA-compliant hearing conservation program and establish and implement the appropriate PPE requirements when personnel are exposed to noise levels that exceed OSHA action levels.
- v. Monitor the worksite and nearby and adjacent areas as work proceeds. Modify control measures if found to be ineffective.

T. Portable Generators

- i. Notify the Northwestern Project Manager prior to bringing any portable generators to campus.
- ii. Adhere to the Northwestern [Portable Power Generation Procedures](#).
- iii. Portable generator use in indoor, enclosed, and confined space environments is prohibited unless approved by Northwestern, including EHS.

U. Portable Ladders

- i. Adhere to the Northwestern [Portable Ladder Safety](#) program when personnel use portable ladders.
- ii. Job-made ladders must be constructed and maintained to current ANSI standards.

V. Radiofrequency (RF) Energy

- i. Notify the Northwestern Project Manager prior to any work on or near RF-emitting equipment (e.g., antennas, x-ray machines).
- ii. Adhere to applicable regulations (e.g., FCC, OSHA).
- iii. Obey all posted warning and danger signage.
- iv. Conduct a risk assessment when work is planned on or near potential RF hazards, and implement an effective safety plan, monitoring, and control measures (e.g., PPE, lockout/tagout) to ensure maximum permissible exposure (MPE) limits are not exceeded.
- v. Installations must include the appropriate warning and danger signage and a means to lockout/tagout the power supply.

W. Tents (including temporary structures)

- i. Notify the Northwestern Project Manager prior to erecting any tents.
- ii. [Tents](#) over 10 feet x 10 feet in dimension in the City of Evanston require a city permit and must be inspected and approved by EHS and the fire department prior to usage.
- iii. Additional Northwestern tent approvals may be required (e.g., Norris Events, Athletics).

X. Trash Compactors

Adhere to the Northwestern [General Compactor Safety Guidelines](#) and manufacturer guidelines.

Y. Trenching and Excavations

- i. Notify the Northwestern Project Manager prior to any trenching or excavation.
- ii. Trenching and excavating activities must be performed under the supervision of a competent person.
- iii. Adhere to all requirements of the [Illinois Underground Utility Facilities Damage Prevention Act](#) and OSHA 1926 Subpart P – Excavations, based on soil type, including but not limited to bracing, shoring, shielding, and trench boxes.
- iv. Mark out the planned excavation site with white paint or flags (black when snow is present), or by any other effective means.
- v. Contact [JULIE](#) by dialing 811 or (800) 892-0123.
- vi. All utilities must be located and appropriately marked at the worksite prior to the start of work.
- vii. The Northwestern Project Manager will provide written or verbal approval to commence digging once utilities have been located and the contract between Northwestern and the contractor is fully executed.
- viii. Protect personnel, equipment, pedestrians, and vehicles from worksite hazards, including fall hazards, by utilizing barricades or similar equipment.

Z. Unmanned Aircraft Systems (UAS) ‘Drones’

- i. Notify the Northwestern Project Manager prior to UAS operation.
- ii. Adhere to the Northwestern [Unmanned Aircraft Systems](#) program, the Federal Aviation Administration (FAA) regulations, and any other applicable regulations (e.g., city) when operating UAS on behalf of Northwestern on, above, or inside campus property within the United States, including activities conducted off University property within the United States.

AA. Water Intrusion

Adhere to the Northwestern [Water Intrusion](#) guidelines when responding to and/or when personnel or operations are affected by water intrusion events (e.g., stormwater, plumbing, utilities).

VI. Research Laboratory Access

A. Overview

- i. Northwestern research laboratories may contain chemical, radiological, biological, laser, or magnetic field hazards. Spaces containing these potential hazards will have signage where applicable.
- ii. It is imperative that contractors obey all signage requirements and restrictions and follow all protocols set forth by Northwestern to ensure a safe working environment at all times.

B. Authorization

Obtain authorization from a laboratory representative (e.g., principal investigator 'PI', lab manager, safety designate) and the Northwestern Project Manager prior to entry and work in laboratory spaces.

C. General Safety

- i. Wear all the required PPE.
- ii. Do not leave doors to laboratories open/unsecured when not attended.
- iii. Do not disturb or move any materials or equipment in the laboratory space unless a laboratory representative provides specific approval.
- iv. If hazardous or unexpected conditions or uncertainties become present in the laboratory space, stop all work, exit the space, and notify the Northwestern Project Manager, laboratory representative, or [Research Safety](#) (Evanston campus: 847-491-5581, Chicago campus: 312-503-8300) immediately.

VII. Incident Reporting

- A. Promptly report all incidents (e.g., injuries, near misses, property damage) to the Northwestern Project Manager and regulatory authorities (e.g., OSHA), if applicable.
- B. Conduct incident investigations to determine root cause and corrective actions and submit to EHS, who may contact the contractor with any questions.
- C. Cooperate with the Northwestern [Incident Investigations](#) program.

VIII. Emergencies

- A. Adhere to the Northwestern [Emergency Management Guidelines](#).
- B. Personnel are encouraged to enroll in Northwestern [Emergency Notifications](#) to receive timely campus community information in the event of a crisis affecting the University.
- C. Comply with all instructions provided by their Northwestern Project Manager, emergency responders, or other University officials.
- D. Account for personnel and report any missing personnel to emergency responders.
- E. Inform emergency responders if the emergency is in their area of operation and provide information as necessary to support response and recovery efforts.
- F. Evacuations
 - i. Adhere to the [Emergency Evacuation Plan](#).
 - ii. Evacuate buildings and areas immediately upon an evacuation alarm, or as instructed by emergency responders (e.g., police or fire department).
 - iii. If feasible, secure any hazardous equipment or processes that could impede emergency response or exacerbate the emergency.

IX. Recordkeeping

Northwestern and contractors must follow all regulatory requirements for recordkeeping.

X. Regulatory Authority

Northwestern and contractors will comply with the applicable codes and standards, including but not limited to:

[American National Standards Institute \(ANSI\)](#)

[Department of Transportation \(DOT\)](#)

[Environmental Protection Agency \(EPA\)](#)
[Federal Aviation Administration \(FAA\)](#)
[National Fire Protection Association \(NFPA\)](#)
[Northwestern Design Guidelines](#)
[Northwestern Environmental Health and Safety \(EHS\) Policy](#)
[Northwestern Master Specifications](#)
[Occupational Safety and Health Administration \(OSHA\)](#)
City building codes

XI. Contact

For questions, contact Environmental Health and Safety at ehs@northwestern.edu.