

**APPLICATION**

NYU Langone

**PURPOSE**

To ensure the safety of patients, staff, students, tenants, members of the public and contractor personnel during construction, demolition, and abatement at NYU Langone facilities.

**POLICY AND GENERAL INFORMATION**

**1.0 Application**

NYU Langone includes NYU Langone Health System (the System), NYU Hospitals Center (including the NYU Lutheran and HJD campuses), NYU School of Medicine, NYU Lutheran Family Health Centers, and all entities that are controlled by the System.

This policy applies to:

- All indoor and outdoor areas of all NYU Langone owned and leased facilities.
- All employees, contractors and consultants of NYU Langone

**2.0 Definitions**

2.1 **ACSP:** Authorized construction safety professional. A construction safety professional from, or authorized by Environmental Health and Safety (EH&S) Construction Safety group.

2.2 **PM:** The NYU Langone construction project manager.

2.3 **Complex task:** Any potentially hazardous task that requires specific competencies, such as structural engineering expertise, complex crane hoist/lift expertise, or industrial hygiene expertise, for safe and successful completion.

Examples include, but are not limited to:

- confined space entry
- crane and rigging operations
- demolition
- excavation
- hazardous substance abatement

- 2.4 **Occupant impact task:** Any task that presents a substantial probability of negative impact to building occupants or NYU Langone operations, without appropriate coordination and controls. This includes, but is not limited to, tasks that could:
- create noise or vibration above ambient levels
  - impact occupant life safety, e.g. by modifying egress or impairing fire protection systems
  - impact occupant utilities, e.g. through shutdowns
  - release air contaminants, e.g. dust, mold, gases, or vapors, outside of the construction site

- 2.5 **Potentially hazardous task:** Any task that presents a substantial probability of death, serious physical harm, or significant impairment to health without appropriate safety or health protective measures. Examples include, but are not limited to, tasks that could result in:
- being caught in an excavation cave-in
  - being exposed to energized electrical parts
  - being overexposed to health hazards
  - being struck by an object
  - falling 6 feet or more to a lower level
  - working on routine tasks that have become non-routine due to unexpected occurrences such as equipment breakdowns, weather conditions, or changes in the project-specific safety plan.

### 3.0 **General Requirements and Orientation**

- 3.1 Contractor and its employees, subcontractors, and agents shall comply with:
- all federal, state and local regulations
  - the provisions of National Fire Protection Association (NFPA) 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations (latest edition)
  - all safety, health, and equipment requirements set forth in the contract and specifications, including provisions for protecting patients, staff, students, tenants, members of the public and construction personnel
  - all referenced NYU Langone Safety Policies
  - all safety and security requirements of the building owner/ manager where the NYU Langone leases space

- 3.2 Beginning February 1, 2017, construction manager, general contractor, prime electrical contractor superintendents, and other persons responsible for

supervising subcontractors shall complete the American Society of Healthcare Engineers (ASHE) Health Care Construction course and the OSHA 30 hour construction course.

- 3.3 Contractor shall ensure all personnel working on the construction site submit documentation of completion within the last 5 years of an OSHA 1926 (construction) 10-hour course.
- 3.4 Contractor shall provide all personnel with an orientation prior to the start of work. This orientation shall cover all items in the NYU Langone Safety Orientation for Contractor Personnel (see Appendix A), the site-specific rules established by the contractor, any property owner's safety and security requirements, and the emergency evacuation procedures for the work site (e.g., an explanation of RACE and PASS, the location of fire alarm pull stations, and evacuation routes).

#### **4.0 Pre-project and Pre-task Safety and Health Planning**

- 4.1 Contractor shall incorporate pre-project and pre-task health and safety planning into its planning process, consistent with ANSI/ASSE Standard A10.1-2011, Pre-Project and Pre-task Safety and Health Planning.
- Note: NYU Langone may grant exceptions to the literal requirements for pre-project and pre-task planning, e.g., in cases of practical difficulties or unnecessary hardships. These exceptions may permit use of other methods, but only when it is clearly indicated and documented that the chosen alternative methods provide adequate workplace safety and health protection.
- 4.2 As part of the pre-project planning process, contractor shall submit to the PM a project-specific plan which addresses the impact of safety and health on applicable critical topics, including, but not limited to:
- Isolation of construction areas from occupied areas
  - Site access/egress, material delivery, and waste out routes
  - Site security and illumination
  - Protection of NYU Langone facilities and adjacent buildings and property from construction operations
  - Public protection (e.g., temporary walkways, ramps, sidewalk bridges, lighting, signage, and traffic control)
  - Site shanties and offices
  - Worker sanitary, washroom, and changing facilities
  - Onsite first aid, emergency eye wash and shower facilities

- Decontamination facilities
- Storage of combustibles, chemicals, flammable liquids, and compressed gas cylinders
- Protection of existing site utilities
- Materials handling
- Control of environmental hazards
- Location of crane(s), hoist(s), powered-mobile and stationary equipment
- Inclement weather protection plan
- Emergency evacuation plan

The PM will solicit input from an ACSP as needed.

- 4.3 Contractor shall develop a project-specific safety and health plan, which includes provisions for addressing complex tasks, occupant impact tasks, and potentially hazardous tasks. Contractor shall submit the plan to the PM, who will solicit input from an ACSP as needed.
- 4.4 Contractor shall conduct pre-task safety and health planning for complex tasks, occupant impact tasks, and potentially hazardous tasks in coordination with the PM. The PM will solicit input from an ACSP as needed.
- 4.4.1 Contractor shall complete a written task hazard analysis before beginning work on any complex, potentially hazardous, or occupant impact task. All task hazard analyses shall occur as close to the time the task will begin as is feasible.
- 4.4.2 Contractor shall identify the individuals responsible for supervising and performing each complex, potentially hazardous, and occupant impact task.
- 4.4.3 Contractor shall assign responsibility for implementation of safety and health control measures established for each complex, potentially hazardous, and occupant impact task.
- 4.4.4 Contractor shall ensure that each affected supervisor and all affected workers are informed about the task hazard analysis and required to participate in the process. Participation shall include discussion on accomplishing the task step-by-step with appropriate work activities, communication, and personal protective equipment.

- 4.4.5 Contractor shall ensure all workers are informed how to contact the supervisor or competent person overseeing the complex, potentially hazardous, or occupant impact task.
- 4.4.6 Contractor shall ensure that each individual responsible for performing any part of a complex, potentially hazardous, or occupant impact task has been properly trained to perform the task safely.
- 4.4.7 Contractor shall ensure that all affected workers receive the safety and/or health equipment identified in the task hazard analysis and the appropriate training necessary to perform the task safely.

## **5.0 NYU Langone Permits**

- 5.1 Before performing any work, contractor shall obtain from the PM copies of all required NYU Langone permits, such as those listed below. The PM shall review these permits with the contractor and ensure they are posted at the entrance to the job site. The PM shall monitor the contractor to ensure that they conduct the work in accordance with permit requirements.

### Environmental Health and Safety

- Construction/Interim Life Safety (ILS) Permit
- Interim Life Safety and Evacuation Plan (if applicable)

### Facilities Operations

- Confined Space Entry Permit
- Hot Work Permit
- Penetrations Permit
- Pre-Demolition Validation Permit

### Infection Prevention and Control

- Infection Control Risk Assessment (ICRA)

## **6.0 Pre-commencement Conference**

- 6.1 A pre-commencement conference shall be held, attended by the contractor's supervisory personnel, the PM, representatives of all affected operating department(s), and EH&S. If the project impacts an NYU Langone patient care area, a representative of Infection Prevention and Control shall also be present.

- 6.2 The pre-commencement conference shall acquaint the contractor's representatives with NYU Langone safety procedures, and any special safety equipment that shall be required due to the hazards of the project.

## **7.0 Security**

- 7.1 Contractor shall ensure all personnel obtain an I.D. badge issued by the NYU Langone Security Department or the building owner/manager and wear it at all times.
- 7.2 An NYU Langone "Under Construction" sign shall be posted on each door leading into a construction site.
- 7.3 Contractor shall secure the entrance(s) to the site at the end of each work day, and whenever the site is unoccupied.
- 7.4 Contractor shall ensure roof doors are kept closed and locked, and construction site, fire/smoke and exit stair doors are not propped open.
- 7.5 Contractor shall enclose outdoor work areas with a solid, 8-foot construction fence in accordance with New York City law, to keep unauthorized personnel out. This fence shall be constructed of flame-retardant or non-combustible materials. The door or gate for this fence shall not swing outward and shall be kept locked when personnel are not present.
- 7.6 Contractor shall give the NYU Langone Security Department or building manager advance notice of all work: 1) to be performed after hours, 2) that needs to be performed in controlled or restricted areas, and 3) that may adversely affect medical center or leased property operations.

## **8.0 Fire/Incident Notification and First Aid**

- 8.1 Contractor personnel shall immediately report any smoke or fire incident, regardless of severity, as follows:
- 8.1.1 On sites with an active fire alarm system, personnel shall:
- Activate the nearest pull station
  - Call 212 263-3911 (superblock, HJD, Lutheran, and locations with Cisco phone systems) or 911 (all other locations), and provide the address and exact location of the incident
  - Contact the PM

8.1.2 On sites which lack an active fire alarm system, personnel shall call 911, provide the address and exact location of the incident, and then contact the PM.

8.2 Contractor shall be responsible for providing first aid treatment for its personnel. In case of severe injury, personnel shall use the closest Emergency Department or call 911.

8.3 Contractor shall immediately report any incident which involves treatment beyond first aid to the PM.

## **9.0 Public Protection**

9.1 Contractor shall ensure personnel restrict use of cell phones and 2-way radios in accordance with the following NYU Langone Safety Policy:

- 212: Use of Cellular, Mobile Phones, Personal Computers and Laptops

9.2 Contractor shall not perform work in an occupied patient room.

9.3 Contractor shall not perform work in an occupied area without an approved barrier in place (see sections 9.2 and 11.3).

9.4 Contractor shall pre-plan with the PM work to be performed in an occupied area or which may impact occupants (e.g., by producing noise, vibration, dust, or odors).

9.5 Contractor shall minimize, to the fullest extent possible, interactions with patients, staff, students, tenants and members of the public. Where feasible: 1) an elevator shall be dedicated to the demolition/construction project and programmed to stop only on floors where the work is occurring, and 2) tenant elevators shall be programmed not to stop on construction/demolition/abatement floors. Elevator dispatching and programming shall be coordinated by the PM with Facilities or the building manager.

9.6 Where feasible, contractor shall use a separate building entrance for material deliveries and debris removal. If no separate entrance is available, contractor shall schedule debris removal and material deliveries for times when interaction with patients, staff, visitors, and tenants is minimal, factoring in the noise these activities create. Contractor shall assign an escort for all material deliveries and debris removal, to protect building occupants.

- 9.7 Contractor shall not stage or store tools, material, equipment, or debris in occupied areas, or stockpile materials within the construction site.
- 9.8 Contractor shall protect the building against water intrusion, freezing temperatures, dust, odors, and other hazards. Contractor shall also protect windows against physical damage. The materials used to accomplish this shall be flame-retardant or non-combustible.
- 9.9 Contractor shall protect patients, staff, students, tenants, and members of the public from construction, demolition, and abatement operations through the use of appropriate construction partitions, fences, barricades, sidewalk bridges, exclusion (safety) zones, and other protective measures. Posting of proper warning and directional signage is required.
- 9.10 Contractor shall ensure that temporary pedestrian walkways are at least 5 feet in width and kept free of tripping and other hazards. Where pedestrians are directed into a roadway, properly pinned concrete jersey barriers shall be used to separating the walkway from vehicular traffic. The barriers shall have flashing lights at 15 foot intervals. All walkway and lane changes/closures, shall be set up in accordance with the NYC Department of Transportation approved plan. Ramps and curb cuts shall be constructed in accordance with a NYS registered design professional's drawing to ensure compliance with applicable codes (e.g., ADA).
- 9.11 Contractor shall install sidewalk bridges(s) and/or other protective measures for the benefit of the public and workers where required by code or otherwise deemed necessary by NYU Langone. All protection shall be installed in accordance with a NYS registered design professional's stamped drawing. Installation and removal of sidewalk bridges and other protection which pose a hazard to pedestrians shall be pre-planned with the PM and EH&S to reduce or eliminate the hazard (e.g. by closing the area, or performing work off hours). Lighting shall be vandal-proof fluorescent fixtures.
- 9.12 Contractor shall protect elevated leading edges and work platforms against falling objects by installing toe boards and vertical netting.
- 9.13 Contractor shall provide an adequate number of flag persons to direct pedestrian and vehicular traffic wherever construction operations, trucks, and equipment transverse into public areas.

- 9.14 Contractor shall not pick loads over people or occupied vehicles. Where loads must be picked over an occupied building, the top 2 floors of the building shall be vacated or overhead protection provided with a design live load of 300 pounds per square foot.
- 9.15 Contractor shall ensure that workers performing tasks while elevated above floor level tether their tools to prevent them from falling.
- 9.16 Contractor shall secure construction materials and debris against displacement by winds. Cranes, hoists and scaffolds shall not be used when wind speeds exceed the limit set forth by the manufacturer or New York City law, whichever is lower.

#### **10.0 Fire Safety and Egress**

- 10.1 Contractor shall not obstruct corridor egress, access to stairs, or exit signage in an occupied area unless pre-planned with the PM and EH&S (see NYU Langone Interim Life Safety Program policy).
- 10.2 Contractor shall ensure that walls separating construction areas from occupied areas have a one hour fire-resistance rating (any door/frame in these walls must have a 45 minute protection rating) unless the site has an approved automatic fire sprinkler system which complies with NFPA 13.
- 10.3 Contractor shall ensure that all construction partition doors, regardless of rating, self-close, latch and do not have a gap exceeding 3/4" at the bottom or 1/8" between the door and its frame.
- 10.4 Contractor shall maintain a proper egress path within the site, marked with lighted or photo-luminescent exit signs with directional arrows. All site doors must be available for exit during working hours.
- 10.5 Contractor shall ensure that combustible debris is removed from the site daily.
- 10.6 Contractor shall ensure that materials introduced into the site (e.g., plywood, plastic sheeting, rigid insulation, tarps, and debris netting) are flame-retardant or non-combustible.
- 10.7 Contractor shall not use gasoline or propane unless specifically reviewed and authorized by EH&S.

10.8 Contractor shall comply with the following NYU Langone Safety Policies:

- 104: Tobacco Free Facilities
- 122: Fire Prevention
- 126: Fire Safety Requirements for Interior Finish Materials
- 131: Fire Sprinkler/Standpipe System Impairment
- 143: Hot Work
- 145: Interim Life Safety Program
- 147: Penetration of Fire/Smoke Barrier

### 11.0 Utility Safety

11.1 Contractor shall verify that all utilities impacted by the project (e.g. medical and natural gas, electric, fire protection systems, steam, and plumbing) are terminated or properly locked/tagged out.

- Prior to the start of the project, the PM shall work with Facilities or the building owner/manager to complete the Pre-Demolition Validation Permit to ensure this is completed.

11.2 Contractor shall comply with the following NYU Langone Safety Policies:

- 133: Installation and Testing of New Medical Gas Outlets/Piping
- 157: Electrical Safety

11.3 Contractor shall not perform work on any live utilities, systems, or equipment unless approved by Facilities or the building owner/manager and pre-planned with EH&S. Work on live electrical systems shall be performed in accordance with all requirements set forth in NFPA 70e.

11.4 Contractor shall contact New York 811 and comply with their requirements prior to starting any excavation work.

11.5 Contractor shall employ ground penetrating radar (GPR) or equivalent technology to locate and mark underground utilities prior to the start of excavation. When the excavation reaches the approximate location of a utility, personnel shall hand dig to avoid striking or otherwise damaging it. The utility shall be protected, supported and/or relocated for the benefit of the workers and to reduce the likelihood of damage.

11.6 Where interior work requires penetrating floors, the contractor shall use GPR to detect in-slab utilities. The contractor shall also use an appropriate device to

detect utilities within wall cavities prior to the start of demolition (e.g., a wall scanner for drywall or GPR for wire lath).

- 11.7 Contractor shall not use the building outlets unless approved by Facilities or the building owner/manager.
- 11.8 Where any temporary electrical panel is to be employed outdoors, contractor shall properly protect the panel against exposure to water, and the panel shall be equipped with Ground Fault Circuit Interrupter (GFCI) breakers.
- 11.9 Contractor shall ensure that electrical cables are not run on the ground, through doorways, or put in direct contact with conductive materials or sharp edges where they are subject to pinching or chafing.

**12.0 Control of Hazardous Materials and Infection / Air Contaminants**

- 12.1 Contractor shall comply with all requirements set forth in the site-specific Infection Control Risk Assessment (ICRA) for the project.
- 12.2 Contractor shall verify removal of NYU Langone supplies, equipment, and furniture from the space prior to the start of construction. Immovable items shall be sealed with plastic to prevent dust intrusion.
  - The PM shall arrange for the removal.
- 12.3 Where the construction partition does not require a fire-resistance rating (see section 9.2), the partition shall be constructed of non-combustible material (e.g., drywall) and be smoke-tight. The occupied side of all construction partitions must be painted so it is washable.
- 12.4 Contractor shall use the Edge Guard partition system (<http://www.edge-guard.com/>), a system that provides equivalent protection (e.g., dust and security) or a mobile containment unit (e.g. Clean Work Booth, or Kontrol Kube) for work in occupied areas.
- 12.5 Contractor shall comply with the following NYU Langone Safety Policies:
  - 108a: Hazardous Waste from Contractors
  - 121: Hazard Communication
  - 144: Lead Management Program
  - 159: Asbestos Management Program

- 12.6 Contractor shall ensure personnel are knowledgeable about, and do not disturb, suspect asbestos-containing material (ACM). Contractor shall validate that an asbestos survey was completed prior to undertaking any work that may disturb suspect ACM. Contractor shall immediately stop work, secure the area, and contact the PM if suspect ACM is found at any point during the course of the project.
- 12.7 Contractor shall employ appropriate engineering controls (e.g., exhaust ventilation, power tools with vacuum attachments, or wet methods) when performing dust and fume producing work indoors and outdoors.
- 12.8 Contractor shall pre-plan and coordinate with the PM, EH&S and Facilities Operations or the building manager all work to be performed in close proximity to air intakes for an occupied building, to ensure proper controls are in place.
- 12.9 Contractor shall ensure the perimeter of the site is smoke-tight, supply and return HVAC registers are sealed with sheet metal, and that the site is maintained under negative pressure at all times, with air exhausted directly outdoors. Where exhausting air outdoors is not feasible, the PM shall have EH&S assess alternatives prior to start of work (e.g., neutral air pressure with HEPA units).
- 12.10 Contractor shall not use the building's return air system to exhaust air out of the construction space, or exhaust air from the construction space to a clinical or other occupied area.
- 12.11 Where the construction site walls don't extend up to the underside of slab, Contractor shall seal the gap between the top of the wall and the slab with smoke tight, flame retardant plastic.
- 12.12 Contractor shall place a sticky mat immediately inside each site door and change it as necessary to capture dust, e.g., from on workers' shoes or cart wheels.
- 12.13 Contractor shall ensure that the ends of ductwork delivered to, and installed in, the site are sealed with plastic film to keep dust out.
- 12.14 Contractor shall ensure all chemicals and products used are zero Volatile Organic Compound (VOC) and low odor, with a Safety Data Sheet (SDS) health rating not exceeding 1 on a scale of 0 to 4, unless reviewed by EH&S (see NYU Langone Design Guidelines document). Contractor shall maintain on-site SDS for each chemical product.

12.15 Contractor shall ensure that welding is done only with an operable smoke eater at the point of the work.

12.16 Contractor shall ensure that all power tools and equipment are electric-powered. Where diesel-powered equipment represents the only feasible option, it shall be equipped with a tier 4 engine or a diesel particulate filter and authorized by EH&S.

12.17 Contractor shall ensure that all debris containers are wiped down and capped/sealed with plastic prior to leaving indoor work areas.

### **13.0 Fall Prevention and Protection including Ladders, Scaffolds and Aerial Lifts**

13.1 Contractor shall comply with the following NYU Langone Safety Policies:

- 160: Fall Prevention and Protection
- 163: Ladders, Scaffolds and Aerial Lifts.

### **14.0 Demolition**

14.1 Contractor shall pre-plan and conduct all demolition work in accordance with OSHA 1926 subpart T, the New York City Building Code, all local laws, and the provisions of NFPA 241.

14.2 Contractor shall schedule a “Time out” with the PM and an ACSP prior to the start of demolition to ensure all necessary protection and controls are in place.

### **15.0 Excavation, Foundation and Erection**

15.1 For excavations greater than 4 feet in depth, contractor shall ensure ladder access at 25 feet intervals. Contractor shall ensure that excavations 5 feet or greater in depth are properly sloped, benched or protected by an engineer-designed shoring system. Contractor’s designated competent person shall inspect excavations daily and ensure all hazards are properly controlled.

15.2 Contractor shall protect the excavation perimeter (topside) with a guard rail system (top rail, mid rail and toe board).

15.3 Contractor shall install shoring and concrete formwork in accordance with the manufacturer’s specifications and the NYS registered design professional’s stamped drawings.

15.4 Contractor shall protect rebar, which poses an impalement hazard. Contractor shall not use rebar as a fence post.

**16.0 Power Tools and Equipment**

16.1 Contractor shall comply with the following NYU Langone Safety Policy:

- 161: Power Tools and Equipment.

16.2 Contractor personnel shall use a GFCI device with all power tools.

**17.0 Exterior Material Handling, Crane and Rigging Operations**

17.1 Contractor shall pre-plan at least 3 weeks in advance all exterior material handling, crane picks, and other rigging operations. Pre-planning shall include the PM, an ACSP, and all other necessary departments (e.g. Security and Facilities), and be conducted in accordance with OSHA 1926 subparts N, R and CC, and all New York City local laws.

17.2 Contractor shall have exterior ground conditions for equipment assessed by a NYS Public Engineer (P.E.).

17.3 Contractor shall have all surfaces that rigged equipment will travel over within the building assessed by a NYS Structural Engineer (S.E.).

17.4 Contractor shall provide equipment placement and rigging plans for review. Contractor shall avoid picks which meet the OSHA 1926.751 definition of a “critical lift” where feasible (e.g., by breaking down picks to reduce weight, or using lifting equipment that has greater capacity). Where this is not feasible, the pick must be reviewed and approved by an ACSP. Contractor shall not pick lifts over people.

17.5 Contractor shall verify that the 2 floors below the pick location have been vacated in accordance with the NYC requirements.

17.6 Contractor shall employ an adequate number of flag persons to control and direct pedestrians.

**18.0 Powered Mobile Equipment and Industrial Trucks**

18.1 Contractor shall comply with the following NYU Langone Safety Policy:

- 149: Powered Industrial Truck Program

**19.0 Confined Space Entry**

- 19.1 Contractor shall pre-plan with an ACSP, at least 2 weeks in advance, any work to be performed in a confined space and shall conduct such work in accordance with OSHA 1926 Subpart AA and the following NYU Langone Safety Policy:
- 138: Confined Space Entry

**20.0 Personal Protective Equipment**

- 20.1 Contractor shall comply with OSHA Standard 1926 Subpart E: Personal Protective and Life Saving Equipment.
- 20.2 Personnel shall wear, at a minimum, work boots, long pants and a short sleeve shirt.
- 20.3 Personnel shall wear the proper ANSI hard hat for the hazard that exists (e.g., impact, falling/flying object, or electrical hazard).
- 20.4 Contractor shall ensure personnel use all necessary task-specific personal protective equipment and clothing, including but not limited to:
- Cut-resistant and fire-retardant gloves
  - Dust mask
  - Hearing protection
  - Safety glasses and face shields
  - Welding helmet and jacket
- 20.5 Contractor shall ensure personnel wear reflective vests when directing traffic and working in close proximity to trucks and powered-mobile equipment. Such vests shall not be worn when performing hot work.
- 20.6 Contractor shall complete a pre-task assessment in coordination with an ACSP prior to undertaking any work which requires personnel to use respirators.
- Contractors whose personnel wear respirators shall provide their written respiratory protection plan to EH&S.
  - All personnel shall present documentation of fit testing and training in the proper use and maintenance of respirators.  
Engineering controls (e.g. ventilation or wet methods) shall be employed to minimize airborne contaminants or chemical exposure for patients, staff, students, tenants, members of the public, and other contractor personnel.

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| <b>Issue date</b>  | 02/2017  |
| <b>Replaces</b>    | 11/2016  |
| <b>Reviewed by</b> | S. Haney, Environmental Health and Safety<br>NYU Langone Construction Safety Committee<br>HJD Environment of Care (EOC) Committee<br>Lutheran EOC Committee<br>Lutheran Family Health Centers EOC Committee<br>NYUHC EOC Committee |

**Summary of Revisions**

| <b>Revision Date</b> | <b>Section</b>           | <b>Changes</b>   |
|----------------------|--------------------------|--|
| February 2017        | Application              | Changes NYULMC to NYU Langone  |
|                      | 1.0                      | Defines NYU Langone  |
|                      | Review by                | Adds review by HJD, Lutheran, and Lutheran Family Health Centers EOC Committee   |
| November 2016        | 2.2, 2.4                 | Adds training requirements   |
|                      | 7.1                      | Adds requirement to call 212 263-3911  |
|                      | 8.2, 8.3, 8.7, 8.8, 8.11 | Adds requirements for public protection and work in occupied areas   |
|                      | 9.2                      | Adds requirement for fire-resistance rated construction partitions   |
|                      | 9.3, 9.5, 9.7            | Adds requirements for construction partition doors, removal of combustible materials and restricted use of gasoline and propane        |
|                      | 10.6, 10.7, 10.9         | Adds requirements to use a scanner to detect in wall utilities, restricted use of building outlets and protection of electrical cables |
|                      | 11.9-11.13, 11.17        | Adds requirements for infection/dust control   |
|                      | 16                       | Adds requirements for exterior material handling, crane and rigging operations   |
|                      | Appendix A               | Adds NYULMC Safety Orientation for Contractor Personnel  |
| November 2015        | 11.2                     | Specifies use of Edge Guard or equivalent partition system   |
|                      | Summary of Revisions     | Adds Summary of Revisions  |

Construction Contractor Safety Requirements  
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NYU Langone Safety Orientation for Contractor Personnel  
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NYU Langone values safety and is committed to protecting its patients, staff, construction personnel and the public from hazards associated with construction.

As a worker on an NYU Langone construction site, you are responsible for:

- pursuing safety on a daily basis
- complying with the law, standards and procedures
- following NYU Langone' Construction Safety Rules
- proactively helping to identify and address safety concerns
- intervening to correct unsafe conditions and behaviors
- stopping work if a hazard presents an imminent danger to self or others
- looking out for co-workers and helping them correct any unsafe behaviors

Failure to meet your responsibilities for safety will result in strict disciplinary action.

You should report all concerns about safety to your foreman. You may also report them anonymously to NYU Langone' division of Environmental Health and Safety (EH&S) at 212 263-5159.

The following basic Construction Safety Rules apply to all NYU Langone construction sites.

| <b>Category</b>          | <b>Construction Safety Rules</b>  |
|--------------------------|---|
| Asbestos                 | <ul style="list-style-type: none"> <li>• Prior to performing work in existing facilities, confirm that an asbestos survey and any necessary abatement were completed.</li> <li>• If you come into contact with suspect asbestos-containing material, immediately stop work, secure the area, and notify your Foreman.</li> </ul>  |
| Communication / Behavior | <ul style="list-style-type: none"> <li>• Do not speak to patients.</li> <li>• Communicate with medical center personnel only when necessary.</li> <li>• In patient care areas, communicate only with the Charge Nurse.</li> <li>• Ensure all communication is courteous and professional.</li> </ul> <p>NYU Langone has a zero tolerance policy for inappropriate communication and behavior (e.g. harassment, verbal/physical altercation, drug/alcohol use, or smoking). Such behavior will result in immediate and permanent removal from NYU Langone construction projects.</p> |
| Doors                    | <ul style="list-style-type: none"> <li>• Keep construction site, stairwell and roof doors closed.</li> </ul>  |
| Egress                   | <p>Prior to work that may obstruct or restrict egress:</p> <ul style="list-style-type: none"> <li>• Preplan to minimize the impact on occupants.</li> <li>• Review the Interim Life Safety (ILS) and Evacuation Plans prior to starting the work.</li> <li>• Implement all precautions listed on the ILS and Evacuation Plans.</li> </ul>   |

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|                   |   |
|-------------------|---|
| Electrical        | <ul style="list-style-type: none"> <li>• Do not use medical center outlets unless approved by Facilities or the building manager.</li> <li>• Use a GFCI device with all power tools and equipment.</li> </ul>   |
| Fire              | <p>Immediately report any smoke or fire incident, <u>regardless of severity</u>, as follows:</p> <p>On sites with an active fire alarm system:</p> <ul style="list-style-type: none"> <li>▪ Activate the nearest pull station</li> <li>▪ Call 212 263-3911 (superblock, HJD, Lutheran, and locations with Cisco phone systems) or 911 (all other locations), and provide the address and exact location of the incident</li> </ul> <p>In locations which lack an active fire alarm system, call 911, provide the address and exact location of the incident, and then contact your Foreman.</p>   |
| Hot Work          | <p>E.g., all cutting, welding, burning, brazing, grinding or other operations that produce flames, spark or slag.</p> <ul style="list-style-type: none"> <li>• <b>Do not</b> perform hot work unless you and others working on the task have the required, valid certifications (e.g., have an FDNY Certificate of Fitness and NY welder’s license).</li> <li>• Obtain a new Hot Work Permit every day, e.g., from Facilities or the building manager.</li> <li>• Before starting work, remove flammables/combustibles from within 35 feet of the hot work area.</li> <li>• Implement protective measures to contain sparks and slag.</li> <li>• Use an operable smoke eater at the point of the work for all welding.</li> <li>• Remove compressed gas cylinders from building when not in use and at the end of each work day.</li> </ul> |
| ID                | <ul style="list-style-type: none"> <li>• Wear NYU Langone ID at all times.</li> </ul>   |
| Infection Control | <ul style="list-style-type: none"> <li>• Review the Infection Control Risk Assessment (ICRA) during pre-planning.</li> <li>• Implement all controls listed on the ICRA.</li> <li>• Prior to work in patient rooms, remove all clinical supplies, equipment and furniture. If items cannot be removed, seal with plastic.</li> </ul>   |
| Injuries          | <ul style="list-style-type: none"> <li>• Report all injuries requiring treatment beyond first aid immediately to your Foreman.</li> </ul>   |
| Life Safety       | <ul style="list-style-type: none"> <li>• Review the Interim Life Safety (ILS) Permit during pre-planning.</li> <li>• Implement all controls listed on the ILS Permit.</li> </ul>  |

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|--------------------------------------|--|
| Isolation from occupied areas        | <ul style="list-style-type: none"> <li>• Ensure that all work is properly isolated from occupied areas by utilizing smoke-tight partitions or a clean work booth (e.g., a Kontrol Kube).</li> <li>• Seal all HVAC vents with sheet metal to prevent migration of construction dust to other occupied areas.</li> <li>• Use exhaust fans equipped with HEPA filters within work areas and work booths to capture construction dust.</li> <li>• <b>Do not</b> perform work in occupied patient rooms.</li> <li>• Do not store or stage tools, materials, equipment, or debris in occupied areas.</li> </ul>  |
| Penetrations                         | <ul style="list-style-type: none"> <li>• Obtain a Penetrations Permit from Facilities or the building manager prior to performing any work above the ceiling or penetrating a smoke or fire barrier.</li> <li>• Wear the blue penetrations vest (if applicable) and have the Penetrations Permit with you when working above the ceiling.</li> <li>• Use only Hilti fire-stopping products.</li> <li>• Seal all penetrations in smoke/fire barriers with proper fire-resistant materials (e.g., mineral wool, fire caulk, U.L. listed drywall assemblies or rated access panels) at the end of each work day.</li> <li>• Do not seal penetrations with plywood, plastic, corex, masonite, fiberglass or spray foam insulation.</li> </ul>  |
| Pre-planning                         | <ul style="list-style-type: none"> <li>• Pre-plan all work and implement necessary protective measures (e.g., for windows, air intakes, and public walkways) prior to beginning work.</li> </ul>   |
| Smoking                              | <ul style="list-style-type: none"> <li>• <b>Do not</b> smoke or use electronic cigarettes within medical center facilities, courtyards, roofs, or within 25 feet of entrances to them.</li> <li>• Only smoke in designated smoking locations.</li> </ul>   |
| Utility Shutdowns and Energy Control | <ul style="list-style-type: none"> <li>• <b>Do not</b> perform work on live utilities unless pre-planned and specifically approved by Facilities or the building manager, and EH&amp;S.</li> <li>• Preplan with Facilities or the building manager and confirm shutdown of: <ul style="list-style-type: none"> <li>– fire alarm and fire suppression system components (e.g., sprinkler systems or smoke detectors) prior to any work that has potential to activate them (e.g., work involving dust, hot work, steam, heat or physical contact).</li> <li>– any necessary utilities (e.g., electric, medical gas, plumbing, steam, and HVAC) prior to undertaking any demolition, using the Pre-Demolition Validation Permit.</li> </ul> </li> <li>• Scan floor slabs with GPR and walls with a wall scanner prior to penetrating.</li> </ul> |
| Waste                                | <ul style="list-style-type: none"> <li>• Wipe down and seal with plastic all debris containers prior to traveling from a construction area to another area.</li> </ul>   |