

Environment of Care and Interim Life Safety Measures

Handbook

Life Safety and Environment of Care requirements, guidelines, and protocols
For Cleveland Clinic Caregivers, Management Companies
Construction Contractors and Consultants
Fire Safety



Cleveland Clinic

****Content of this handbook is intended for Cleveland Clinic Main Campus entities and may be subject to change for Cleveland Clinic Regional entities***

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Scope

The Environment of Care and Interim Life Safety Measures Handbook is a guideline to ensure that all construction, renovation and other similar type activities are completed in accordance with all applicable Cleveland Clinic policies and procedures.

Department

The content of this handbook is created and modified by Environmental Health and Safety. The guidance in this handbook should be verified with the appropriate representative at the specific location.

Environmental Health and Safety Department

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MISSION

Our mission is to create, promote and maintain a safe and healthy environment for all individuals at the Cleveland Clinic.

VISION

We are leaders in protecting the environment and the health and well-being of our patients, employees, visitors, and the community we serve. We will strive for continuous improvement in each of our healthcare, research, and operational support areas, while providing solutions that eliminate hazards.

Regulatory Agencies

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

The mission of the international nonprofit NFPA, established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education.

NFPA 101, LIFE SAFETY CODE

The Code addresses those construction, protection, and occupancy features necessary to minimize danger to life from the effects of fire, including smoke, heat, and toxic gases created during a fire. The Code established minimum criteria for the designs of egress facilities so as to allow prompt escape of occupants from buildings or, where desirable, into safe areas within buildings.

Other Fire-Related Considerations; The Code addresses other considerations that are essential to life safety in recognition of the fact that life safety is more than a matter of egress. The Code also addresses protective features and systems, building services, operating features, maintenance activities, and other provisions in recognition of the fact that achieving an acceptable degree of life safety depends on additional safeguards to provide adequate egress time or protection for people exposed to fire.

CENTERS for MEDICARE and MEDICAID SERVICES (CMS)

The Social Security Act (the Act) mandates the establishment of minimum health and safety standards that must be met by providers and suppliers of participating in the Medicare and Medicaid programs. Cleveland Clinic participates in the Medicare and Medicaid programs. The Medicare and/or Medicaid provider must illustrate compliance with National Fire Protection Association (NFPA) 1010 Life Safety Code (LSC) requirements and includes links to applicable laws, regulations and compliance information. National Fire protection codes become enforceable by CMS.

THE JOINT COMMISSION

An independent, not-for-profit organization, The Joint Commission accredits and certifies more than 17,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards.

Joint Commission standards address the hospital's performance in specific areas, and specify requirements to ensure that patient care is provided in a safe manner and in a secure environment. An area of focus in this handbook will deal with how work activities will be conducted with applicable regulatory requirements.

- Interim Life Safety Measures (ILSM): Maintaining a safe, functional, and effective environment for patients, staff, and visitors when life safety is diminished because of Life Safety Code (LSC) deficiencies and/or construction activities. This Standard Operating Procedure outlines the procedures for implementing ILSM, a series of 13 administrative actions, to temporarily compensate for hazards posed by existing LSC deficiencies and/or construction activities.

INTERIM LIFE SAFETY MEASURES (ILSM) POLICY

Purpose

To protect the occupants during periods when the *Life Safety Code*™ is not met or during periods of construction

Policy

When the hospital identifies Life Safety Code™ deficiencies that cannot be immediately corrected or during periods of construction, Interim Life Safety Measures (ILSM) will be implemented.

The criteria for evaluating when and to what extent the hospital implements special measures to compensate for increased life safety risk include, but are not limited to, the following:

Code Deficiency or Activity Criteria	Interim Life Safety Measure
LS.01.02.01 EP2 Alarms out of service for 4 or more hours in a 24 hour period or sprinklers out of service more than 10 hours in 24 hour period in an occupied building.	1. Notify the local fire department (or other emergency response group) and initiate a fire watch. Notifications and fire watch time must be documented. Note: follow instructions from local fire department (if other than above).
LS.01.02.01 EP3	2. Post signage identifying the location of alternative exits in affected areas. Building occupants shall be trained in

Means of egress blocked or altered by work activities.	the means of egress changes and the training shall be documented.
LS.01.02.01 EP4 Work activities occurring on property that impact means of egress or that could create an ILSM deficiency.	3. Inspect exits in affected areas on a daily basis.
LS.01.02.01 EP5 Smoke detector out of service.	4. Provide temporary heat detection or initiate a fire watch when instructed by EHS. Fire watch time must be documented.
LS.01.02.01 EP6 Fire suppression system impaired or extra fuel load present.	5. Extra fire extinguishers will be present for the duration of the work activity.
LS.01.02.01 EP7 Work activities or hazard in proximity to caregivers, patients, or visitors which impact smoke partitions or fire rated barriers.	6. Use temporary partitions that are smoke-tight and made of noncombustible or limited-combustible material that will not contribute to the development or spread of fire and that meet the perimeter of the work space in order to ensure smoke tightness.
LS.01.02.01 EP8 Storage of work activity or renovation materials on Cleveland Clinic property.	7. Increase surveillance of buildings, grounds, and equipment, giving special attention to construction areas and storage, excavation, and field offices. Examples: documenting that a daily inspection has occurred for each day of work activities or by adding surveillance cameras.
LS.01.02.01 EP9 Storage and debris accumulation during work activities.	8. Enforce storage, housekeeping, and debris-removal practices that reduce the building's flammable and combustible fire load to the lowest feasible level. Example: emptying trash containers at the end of shift or moving flammable

	gases to approved, secured locations when not in use.
LS.01.02.01 EP10 Fire Suppression system impaired.	9. Provide additional fire safety training and document training has been completed.
LS.01.02.01 EP11 Means of egress blocked or impaired by work activities.	10. Conduct one additional fire drill per shift per quarter if the means of egress is impaired to less than the width of a patient bed utilized in the work area for more than 48 hours. Review of responsibilities between caregivers and those individuals conducting the work activities will be documented by EHS.
LS.01.02.01 EP12 Temporary heat detection installed.	11. Inspect and test temporary systems monthly. Document the inspection and test date.
LS.01.02.01 EP13 Building deficiencies, work activity hazards, or temporary measures that impact fire and life safety features.	12. Promote awareness to occupants on how to identify work hazard activities and those Interim Life Safety Measures implemented to maintain fire and life safety for the duration of the work activity.
LS.01.01.01 EP14 Impaired structural or impaired compartmental fire safety features.	13. Train caregivers in the hospital on how to compensate for impaired structural or compartmental fire safety features and the appropriate fire evacuation procedures.
LS.01.02.01 EP15 Other ILSMs	14. When other ILSMs are used, document in the “other” section of the hospital’s Survey-Related Plan for Improvement (SPFI) with the Statement of Conditions (SOC).

Note: Facilities under main campus tax identification (Physician practice sites, Family Health Centers, and Ambulatory Surgical Centers) must initiate fire watch and notification of impairment at the commencement of activity.

Oversight and Responsibility

- A. Each facility is responsible for the oversight and monitoring of construction and renovation projects.
- B. All individuals at Cleveland Clinic properties shall comply with this handbook and the Interim Life Safety Measure requirements.

Definitions

Cleveland Clinic Main Campus: Includes Main Campus, and all Family Health Centers, Physician practice sites, Nevada practice sites, Emergency Departments, Express Care Centers, Urgent Care Centers and Ambulatory Surgical Centers reporting to this facility.

Compartmentalization- the dividing of a building into compartments to limit the spread of fire and restrict the movement of smoke.

Life Safety Code- National Fire Protection Association 101, 2012 edition. The code addresses construction, protection, and occupancy features necessary to minimize danger to life from fire, including smoke, fumes, or panic. The Code establishes minimum criteria for the design of egress facilities to allow prompt escape of occupants from buildings, or where desirable, into safe areas within buildings.

Regulatory Requirement/References-Applicable Edition

Cleveland Clinic

Environment of Care and Interim Life Safety Measures Handbook and Procedures

Policies- Non-Smoking Policy, Facility Modifications Policy, Maintaining Corridors and Exit Ways- Ambulatory (Outpatient) and Non-Clinical Areas Policy and Maintaining Corridors and Exit Ways –Hospital (Inpatient Units) and Ambulatory Surgery Centers (ASC) Policy

Joint Commission

Joint Commission Hospital Accreditation Standards

NFPA 101, Life Safety Code

NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolitions operations

Federal, state and insurance regulations

OSHA 29 CFR 1910 and 1926

Ohio Fire Code

DEFINITIONS AND ACRONYMS

- **Interim Life Safety Measures (ILSM):** Maintaining a safe, functional, and effective environment for patients, staff, and visitors when life safety is diminished because of Life Safety Code (LSC) deficiencies and/or construction activities. This policy outlines the guidelines for implementing ILSM, a series of 13 administrative actions, to temporarily compensate for hazards posed by existing LSC deficiencies and/or construction activities.
- **Project Drawing:** A detailed drawing of the proposed work area, which may need to identify areas that would need Interim Life Safety Measures implemented. When Interim Life Safety Measures are affected, the drawing must outline the temporary conditions implemented until the original Life Safety features are restored. This may include but is not limited to, exits, doors, fire alarm system and automatic sprinkler systems.
- **Job Board:** All projects require a board/ binder that includes applicable permits, an approved Project Drawing, a fire extinguisher, a sprinkler shutoff tool, EOC/ILSM Handbook and the Construction Contractor Fire Plan. A clipboard or folder is an acceptable substitute for a job board.
- **Environmental Health and Safety (EHS) Department Mission:** To create, promote and maintain a safe and healthy environment for all individuals at the Cleveland Clinic.
- **Project Manager (PM):** A Cleveland Clinic assigned project manager who is responsible for oversight and knowledge of construction and renovation requirements.
- **General Contractor (GC):** The Company's designated individual in charge of the project.
- **Construction and Renovation Risk Assessment Sub-Committee (CRRAS):** This sub-committee is responsible for providing the life safety conditions and other regulatory work practices that will be required during the construction renovation project.
- **Infection Control Risk Assessment (ICRA):** This is a matrix type risk critique of the proposed construction work. Infection Prevention (IP) reviews the scope and location of activity and stipulates the conditions that must be met for the duration of the project in order to keep patients, employees, and visitors safe. Refer to regional hospitals for practice and protocols.
- **Startup Inspection (SI):** The initial inspection with the Cleveland Clinic representative to ensure the general contractor has followed the proper procedure for obtaining permits, procuring safety equipment and formulating a Project Drawing. It will cover specific details about the project scope and assure compliance with Cleveland Clinic procedures.

PROJECT APPROVAL

The Office of Construction maintains the list of upcoming projects. The contractor will be assigned accordingly.

ID BADGES AND ICRA TRAINING

Contractors must have a valid Cleveland Clinic ID badge while on site. Contractors are also required to complete the ICRA 8 Hour Awareness Training.

CRRAS PERMIT APPLICATION/ICRA REVIEW

Cleveland Clinic Project Manager will submit the CRRAS permit application. The CRRAS members will perform a risk assessment and provide the required conditions that must be adhered to throughout the duration of the project. The Cleveland Clinic Project Manager will receive the approved CRRAS permit.

NOTE: *A construction project that begins without applying for a CRRAS permit will be considered a 'Rogue Project'. The project can be shutdown and may have additional consequences.*

PROJECT DRAWING PROCESS

The Project Drawing must be submitted to the EHS Department for approval. Cleveland Clinic applicable regulations and requirements will determine Project Drawing approval. While working at any Cleveland Clinic Patient Care Facility, the GC must ensure that all applicable regulations are met.

STARTUP INSPECTION (SI) APPROVAL

Once the General Contractor has completed the previous steps of the project approval process (i.e. documents, permits, procedures, and equipment), the GC must contact the Cleveland Clinic representative to schedule the Startup Inspection (SI). The Cleveland Clinic representative can approve or disapprove the start of the project based on the required conditions and safety items at the time of the audit.

NOTE: *The project may not get start-up approval if all of the required conditions have not been met.*

PROJECT DRAWING WITH ILSM PLAN IF APPLICABLE

The Project Drawing is submitted to the EHS Department or Safety Representative for approval. This should take place prior to the Startup Inspection (SI). Interim Life Safety Measures affected during the scope of the project must be documented on the drawing with a narrative outlining what measures will be implemented to temporarily counteract the deficiencies.

NOTE: *Update/Revised Project Drawings Plans need to be submitted for approval when project changes scope from original submission.*

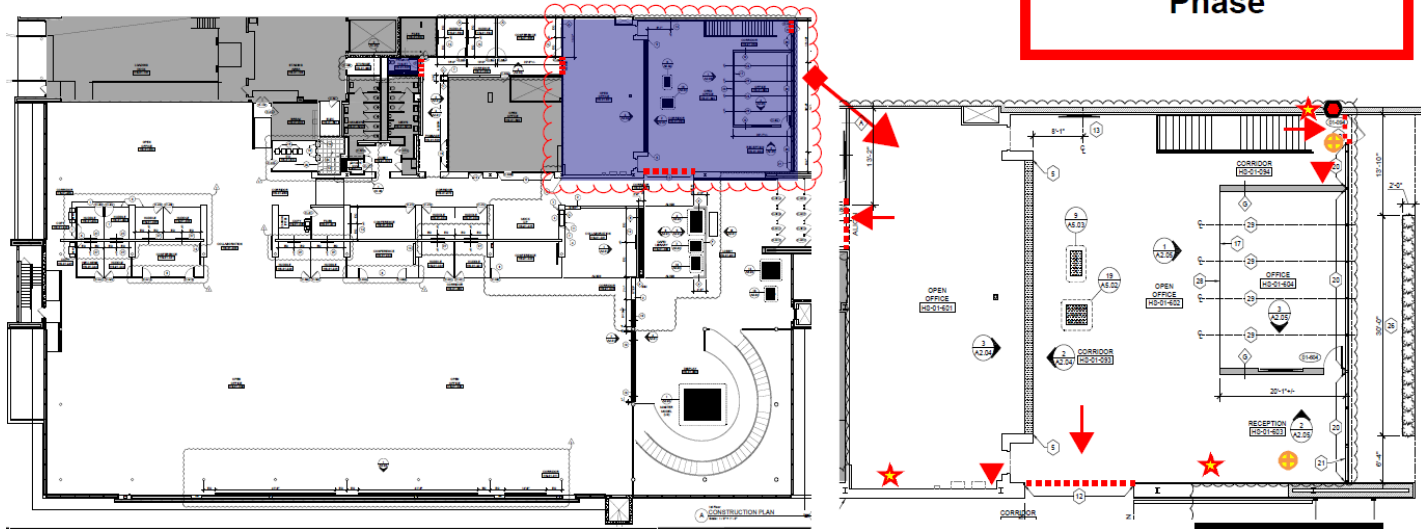
The Project Drawing will include:

- Project ID/CRRAS Permit Number
- Name of company/contractor
- Indicated project areas
- Indicated exit routes
- Rated barriers
- Temporary barriers that will reduce the means of egress
- Trash and equipment transfer routes
- Changes to detectors and suppression systems
- Impacted corridors and/or stairwell closings

PROJECT DRAWING EXAMPLE



CCF Center For Design: VIP Suite Phase



Who: Cleveland Clinic - Owner;
Turner Construction - Construction Manager;
Ohio Desk - General Contractor

What: Renovation/New Build Out of Executive Suite located in the Center For Design building

Where: First floor of Building HS in the far NE corner of the building; Office number HS-01-601, HS-01-602 and HS-01-525

When: 5/17/2018 - 8/31/2018

Why: The purpose of this build out is to design a unique functional space for the executives that will be conducting operations for the newly designed Center For Design building. This Executive Build Out Project will be the first phase for the entire project of the Center For Design Renovation.

APPROVED
By Andrew Stempak at 1:13 pm, May 16, 2018

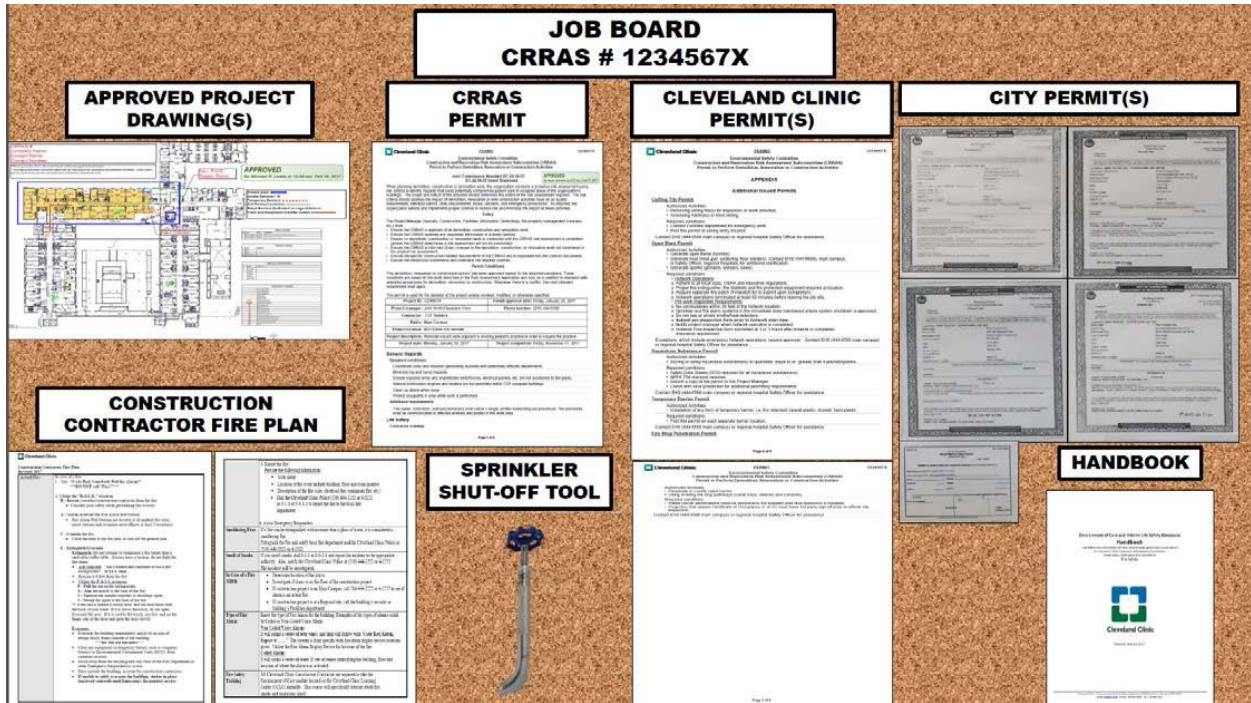
LEGEND	
Fire Extinguisher	▲
Fire Alarm Pull Station	●
Fire Alarm Strobe/Siren	★
Smoke Detector	⊕
Zipwall	- - -
Egress	↓

JOB BOARD

All projects require a job board or folder which should include the following:

- All applicable permits (Cleveland Clinic, Building and Local Municipality)
- Approved Project Drawing
- Construction Contractor Fire Plan
- Sprinkler shutoff tool
- EOC/ILSM Contractor Handbook

Job Board Examples:



PERMITS

CRRAS Permit

Project Related Permits

1. Open Burn Permit (OBP)
2. Hazardous Substance Permit (HSP)
 - a. Obtain applicable permit through local jurisdiction
3. Ceiling Tile Permit (CTP)
4. Temporary Barrier Permit (TBP)
5. Fire Stop Penetration Permit (FSPP)

NOTE: All issued permits are located on the appendix page of the CRRAS Permit under 'Additional Issued Permits'.

To obtain permits:

- CTP, TBP, OBP, Non-City of Cleveland HSP and FSPP permits are requested and obtained through the CRRAS application.
- The City of Cleveland HSP is obtained through the City of Cleveland Fire Prevention Bureau. A completed Application for the Temporary Storage, Handling, Sales or Use of Hazardous Substances/Materials must be signed by an EHS Fire Safety representative and taken to the City of Cleveland Fire Prevention Bureau for approval.
- Family Health Centers, Ambulatory Surgical Centers and physician practice site's HSP – Please check with the local municipality for additional requirements.

Temporary Barrier Permit

A TBP permit is required for the installation of any barrier or partition. Temporary construction partitions must be smoke-tight and non-combustible. The TBP must be posted on each separately installed temporary barrier

Note: Fire retardant zip walls are not permitted as a substituted for fire rated barriers. Any temporary barrier installed where a fire rated barrier has been compromised must be a hard barrier equivalent to the existing rated barrier.

Ceiling Tile Permit

The CTP is required prior to removing ceiling tiles or winking in ceiling areas. The CTP must be posted at the ceiling entry location.

Hazardous Substance Permit

The Cleveland Fire Prevention and Building Code states that a permit is required by contractors for the use, storage, and handling of hazardous substances on Cleveland Clinic Main Campus (i.e. flammable gases, compressed gases, flammable and combustible liquids, and Liquefied Petroleum Gases) when quantities exceed the limits listed below:

Permit Required Quantities of Hazardous Substances:

Flammable Gases: Quantities equal to or greater than five gallons. Examples include gases, solvents, alcohols, mineral spirits, sealers, aerosols, paints and glues.

Combustible Liquids: Quantities equal to or greater than five gallons. Examples include Diesel fuel, solvents, sealers, paints and glues.

Liquefied Petroleum Gas: Any Quantity. Examples include propane and butane.

Flammable Gases: Quantities greater than 200 cubic feet. Examples include acetylene, hydrogen, propylene and methane.

Oxidizing gases: quantities greater than 504 cubic feet. Example: oxygen.

HSP required for any quantity of Liquefied Petroleum Gas (LPG)

-in addition to the HSP, a Certificate of Qualification for the use of LPG's must be obtained from the City of Cleveland Fire Prevention Bureau prior to using LPG's on Cleveland Clinic Main Campus.

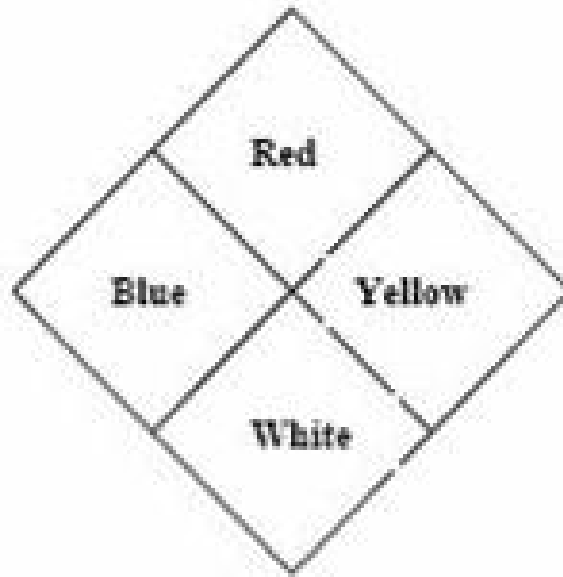
NOTE: Requestors should contact the City of Cleveland Fire Prevention Bureau for details about acquiring the Certificate of Qualification.

NOTE: a copy of the City of Cleveland HSP must be submitted to EHS department upon receipt.

NOTE: A copy of the HSP must be posted on the Job Board/Binder and contractors will provide Safety Data Sheets (SDS) at the job site for all hazardous chemicals used.

Hazardous Materials Diamond (NFPA 704, 0-4)

The NFPA 704 Diamond is required for each hazard material or substance stored on Cleveland Clinic property. The diamond must be posted at the entrance to any location where hazardous materials are present.



Blue= Health

Red= Flammability

Yellow= Reactivity

White= Miscellaneous Hazard

NOTE: Refer to SDS for any unknown hazards

Fire Stopping Penetration Permit

The FSPP is required prior to penetrating or modifying any rated barrier and installing fire stopping systems.

NOTE: Any penetration that cannot have a fire stop system installed immediately must be temporarily filled with fire retardant material such as mineral wool, or fire stopping pillows.

FIRE STOP PENETRATION FORM

The form will be issued by the EHS Department for locations that fall under Main Campus's responsibility. The completed form, which includes locations of the fire stopping penetrations, UL systems and third party signature, must be submitted to the EHS Department upon completion of the third party inspection.

Open Burn Permit

An OBP is required when performing any operation that produces or generates heat, spark or open flame. The OBP and HSP must be posted at the hotwork location.

NOTE: Permits posted at the arc welder power units is not considered the hotwork location.

NOTE: Hot work does not require a completed fire watch log provided the fire detection and suppression systems are active. A Hot Work Inspection Form must be submitted to the EHS department for hot work activities via email at EHS@ccf.org or by fax: 216-444-2419.

Focus on the following precautions:

- **No combustibles within 35 feet of hotwork. If combustibles cannot be removed outside of 35 feet, then they must be protected with FM approved equipment such as fire blankets, curtains or shields.**
- **Fire protection systems, such as sprinklers and detectors, must be operational at all times unless approved with ILSM measures such as a fire watch.**
- **Do not cover or impair smoke or heat detectors.**
- **Have a fire extinguisher at the hotwork operation location.**

Fire Blankets

FM approved equipment such as fire blankets, curtains or shields must be used when combustibles cannot be removed from 35 feet of the hotwork operation.

OPEN BURN PROCEDURES (Hot Work Inspection Form)

- The GC or PM is responsible to submit a completed hot work inspection form to EHS after the completion of each hot work activity.
- A 60 minute or three hour fire watch is required upon the completion of each hot work activity as directed on the hot work inspection form.
- Hot work inspection forms can be faxed to 216-444-2419 or emailed to EHS@ccf.org.
- Emergency hot work must be performed under the supervision of Cleveland Clinic Facilities or the building management company. Coordinate with Cleveland Clinic Police Department. They can be contacted at 216-444-2250.

Things to note:

- Unannounced site visits will occur, and citations may be issued if not compliant.
- For certain hot work or other construction activities, the PM may have to request a shutdown of the fire protection or detection systems.

SHUTDOWNS

Shutdown: The advance approval to temporarily impair part or all of a building Fire Protection System or utility service. If the fire protection system (fire alarm or sprinkler system) is shutdown, fire watch must be performed.

Fire Watch: A method used to monitor an area for excessive combustible or flammable material build-up and for early detection of fires and potential ignition sources. A person assigned to observe ongoing hot work or perform a periodic visual check of the work site, floor or entire building during periods when a Life Safety Feature is impaired.

NOTE: The Facilities Department at Main Campus, FHC's, Physician Practice sites, and Ambulatory Surgical Centers must initiate fire watch and notification of impairment at the commencement of activity.

To initiate a shutdown:

1. The contractor requests shutdown from project manager.
2. Project manager initiates shutdown notice.
3. Cleveland Clinic Facilities will approve/disapprove and provide conditions that will be in place. Ex. Fire watch.
4. Cleveland Clinic Facilities will initiate shutdown.
5. Cleveland Clinic Facilities will communicate to contractor that the shutdown is accomplished.
6. Contractor will perform the work.
7. Contractor will advise facilities when complete.
8. Facilities will communicate to contractor that the fire protection system is back on.
9. The contractor can stop the fire watch upon confirmation.
10. The contractor will submit the completed fire watch log after suppression and/or detection systems have been restored to EHS at ESH@ccf.org or by fax at 216-444-2419.

Operation Procedures:

Contractors at any Cleveland Clinic facility shall not operate, manipulate, or modify any equipment, including but not limited to valves, and mechanical devices, without the appropriate consent of Cleveland Clinic Facilities personnel.



HOT WORK INSPECTION FORM

This *Hot Work Inspection Form* must be completed and submitted to Environmental Health and Safety for any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to: welding, brazing, cutting, grinding, soldering, or high heat generating devices.

<p>Date: _____</p> <p>Pre-Inspection Time: _____ A.M. P.M.</p> <p>Hot Work Start Time: _____ A.M. P.M.</p> <p>Hot Work Stop Time: _____ A.M. P.M.</p> <p>CRRAS Project ID #: _____</p> <p>_____</p> <p>Project Manager: _____</p> <p>Inspector: _____</p> <p>Contact Phone #: _____</p> <p>Responsible Company: _____</p> <p>Hot Work Performed by: _____</p> <p>_____</p> <p>Hot Work Location: _____</p> <p>_____</p>	<p style="text-align: center;"><u>REQUIRED PRECAUTIONS CHECKLIST</u></p> <p>Fire suppression and/or detection systems are active.</p> <p>Fire suppression and/or detections systems are impaired with approved shutdown.</p> <p>Hot work equipment is in good working condition.</p> <p>Smoke/heat detectors are not covered or otherwise impaired by unauthorized means.</p> <p style="text-align: center;"><u>REQUIREMENTS WITHIN 35FT OF HOT WORK</u></p> <p>Flammable hazards are removed from immediate hot work area.</p> <p>Explosive atmosphere is not present.</p> <p>Combustible floors are wet down or otherwise protected.</p> <p>Remove combustible materials from immediate hot work area when possible. Otherwise, protect with FM Approved welding pads, blankets, curtains, fire-resistant tarpaulins or metal shields.</p> <p>All wall and floor openings are covered.</p> <p>Protect or shut down ducts and conveyors that might carry sparks to distant combustible material.</p> <p style="text-align: center;"><u>FIRE WATCH/HOT WORK AREA MONITORING</u></p> <p>Fire watch will be provided during and for 60 minutes after hot work is complete, including any break activity.</p> <p>Fire watch conducted in adjoining areas, above and below when required.</p> <p>Portable fire extinguishers are accessible in the immediate hot work area.</p> <p>Individual/s conducting hot work are trained and practice safe hot work procedures.</p> <p>Monitor hot work area for an additional 3 hours after the 60 minute fire watch. <i>(Applies to areas with no type of alarm or suppression systems)</i></p>
<p style="text-align: center;"><u>Hot Work Inspection Form Submission</u></p> <p>This form must be submitted to Environmental Health and Safety no less than 60 minutes after hot work operations have ceased. <i>(An additional 3 hour active monitoring of the area is required IF the building does not have any type of fire alarm or suppression system)</i></p> <p>Submit to - Fax: (216) 444-2419 Email: ehs@ccf.org</p>	

INTERIM LIFE SAFETY MEASURES (ILSM) INSPECTOR

After obtaining the approved CRRAS permit and approved Project Drawing, contact the appropriate department and or building management to schedule a Startup Inspection (SI).

The following nine categories will be surveyed for the duration of the project:

1.) Means of Egress

- The Fire and Life Safety Code will not permit egress components to be reduced from original design levels unless approved with Interim Life Safety Measures **(Results in project shutdown)**
- Adequate exit signage
- Notification of changes in means of egress

2.) Hot Work Procedures

- Coordinate with Cleveland Clinic Facilities Department or Building Management Company for any shutdown of a fire protection or suppression system
- Provide Hotwork or Fire Watch form as necessary
- Post NFPA 704 diamond as necessary
- Safety Data Sheets as necessary

3.) Barriers/Negative Air

- Ensuring that all temporary construction barriers are installed and maintained properly
 - Only fire retardant and non-combustible material is acceptable
 - Contractors must be present while using Environmental Containment Units (ECU's) and storage of ECU's in egress corridors, stairwells, or exits is not permitted
- Negative Air Environment
- The CRRAS permit or the location of the project will indicate whether a negative air environment is required for the duration of the construction activity
 - If the project requires negative air, a HEPA filter will be required
 - HEPA filtered air should be exhausted to the outside of the work area when possible to maintain a negative air environment in a manner with the least amount of impact to patients, employees, and visitors
- NOTE: Consult Cleveland Clinic Facilities HVAC department or Building Management Company in regards to exhausting the HEPA filter into any facility's HVAC return**
- When negative air is required for the project, a measuring device must be present to indicate that negative air pressure is maintained

NOTE: When negative air is required for a construction and renovation project, it must be maintained at all times unless otherwise noted by Infection Prevention via CRRAS/ICRA or other form of documentation. Not maintaining negative air will result in project shutdown.

4.) Fire Protection

- The Construction company will provide commercial grade fire extinguishers to be used within the perimeter of the job site
- The fire extinguisher must be inspected annually by a certified company and have a visual quick check** performed at interval not to exceed 30 days
- A fire extinguisher must be located at the hot work operation's site
- All rated barrier penetrations must be temporarily fire stopped until the permanent fire stop system is installed

** Visual quick (30-day inspection): Seal not broken or missing, pin in place, gauge is on green, cylinder and hose are not damaged, and the extinguisher is accessible. Initial and date the fire extinguisher tag to indicate that the visual quick check 30-day inspection is complete.

5.) Tobacco Use

- The use of tobacco, smokeless tobacco or electronic cigarettes on Cleveland Clinic property is prohibited
- 6.) Training
- Ensuring that all workers are trained in fire safety, Interim Life Safety Measures, and construction activity requirements
- 7.) Housekeeping
- Ensuring that storage and debris-removal procedures are strictly followed as required
 - Walk off mats are changed and floors are cleaned as needed
- 8.) Permits
- Ensuring that all applicable permits are acquired and posted where required (i.e. job board, work locations, temporary barriers etc.)
- 9.) Safety Conditions
- Ensuring that the work area is safe
 - Compressed gas tanks are secured
 - Construction warning signs are posted
 - Miscellaneous hazards

FIRE DRILLS

The Cleveland Clinic conducts random ILSM fire drills at the main campus and off campus locations. Fire drills are conducted to test the knowledge of the Construction Contractor Fire Plan.

Please refer to the Construction Contractor Fire Plan as a reference in what to do in the event of a fire.

** Know the type of fire alarm system and what it sounds like while working at Cleveland Clinic locations**

Fire Plan



Evacuation Rally Point

Emergency Number:

GSOC/Security for Reporting:

Construction Contractor Fire Plan
Revised: 2019

Actual Fire	<p>In case of a fire:</p> <ol style="list-style-type: none"> 1. Say: “Code Red, Somebody Pull the Alarm!” ***DO NOT yell “Fire!”*** 2. Utilize the “R.A.C.E.” acronym: <ul style="list-style-type: none"> R - Rescue coworker/construction contractor from the fire <ul style="list-style-type: none"> • Consider your safety while performing this activity A - Alarm/Activate the Fire Alarm Pull Station <ul style="list-style-type: none"> • Fire Alarm Pull Stations are located at all marked fire exits, nurse stations and reception areas (Know at least 2 locations). C - Contain the fire <ul style="list-style-type: none"> • Close the door to the fire area, or seal off the general area E - Extinguish/Evacuate <ul style="list-style-type: none"> <u>Extinguish:</u> <ul style="list-style-type: none"> • Stand 6-8 feet from the fire • <u>Utilize P.A.S.S.:</u> <ul style="list-style-type: none"> P - Pull the pin on the extinguisher A - Aim the nozzle at the base of the fire S - Squeeze the handle S - Sweep the nozzle side-to-side across the base of the fire ** If you are not confident to use a fire extinguisher, then close door to the impacted area and evacuate. Do not attempt to extinguish a fire larger than a card table/coffee table. Always have a backup, do not fight the fire alone. Never put a fire between you and your exit. <u>Evacuate:</u> <ul style="list-style-type: none"> • Evacuate the building immediately and go to an area of refuge (Rally Point) outside of the building. ***Do Not use elevators*** • Clear any equipment or temporary barrier, such as visqueen barriers or Environmental Containment Units (ECU), from corridors or exits. • Move away from the building and stay clear of the Fire Department or other Emergency Responders(s) access. • Once outside the building, account for construction contractors. • If unable to safely evacuate the building, shelter in place (enclosed stairwell) until Emergency Responders arrive. ** If the fire is behind a closed door, feel the door with the back of your hand. If it is hot to the touch, do not open. Evacuate the area. If it is cool to the touch, stay low and on the hinge side of the door and open the door slowly.
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	<p>3. Dial your Emergency Number to report the fire to Emergency Responders: <u>Provide the following information:</u></p> <ul style="list-style-type: none"> • Your name • Location of the event include building, floor and room number • Description of the fire (size, electrical fire, equipment fire, etc.) <p>4. Await Emergency Responders. Full cooperation with firefighting authorities is required by all Caregivers and Contractors.</p> <p>5. Report event to the Global Security Operations Center (GSOC) or your Security Personnel (Main Campus and Akron only).</p>
Smoldering Fires	<p>If a fire can be extinguished with no more than a glass of water, it is considered a smoldering fire. Extinguish the fire and notify GSOC or your Security Personnel. There is no need to pull the fire alarm.</p>
Smell of Smoke	<p>If you smell smoke, dial your Emergency Number to report the incident to the fire department and notify the GSOC or your Security Personnel. The incident will be investigated. There is no need to pull the fire alarm.</p>
In Case of a Fire Alarm	<ul style="list-style-type: none"> • Determine location of the alarm. • Investigate if alarm is on the floor, floor above, or floor below of the construction project. • If construction project is on Main Campus, call (216) 444-2222 or 4-2222 to see if alarm is an actual fire. • If construction project is at a Regional site, call the building's security or building's Facilities department.
Type of Fire Alarm	<p>Know the type of Fire Alarm for the building. Examples of the types of alarms could be a Coded Alarm, a Voice Alarm or a basic Non-Coded Alarm.</p> <p><u>Voice Alarm:</u> It will sound a series of three tones, and then will follow with "Code Red Team, report to" The system is floor specific to the Remote Fire Annunciator Panels or Fire Alarm Display Devices which is utilized for determine the specific location of the fire.</p> <p><u>Coded Alarm:</u> It will sound a series of tones (3 sets of tones) identifying the building, floor and location of where the alarm was activated.</p>
Annual Fire Safety Training	<p>All Cleveland Clinic Construction Contractor are required to take the Environment of Care module located on the Cleveland Clinic Learning Center (CCLC) annually. This course will specifically educate about fire, smoke and suspicious smell.</p>
Fire Safety & Extinguisher Training	<p>Fire Safety and Extinguisher training is available upon request, by calling the Environmental Health and Safety Department (216) 444-6588 or the facility's appropriate authority.</p>