

SAFETY AND HEALTH DURING CONSTRUCTION ACTIVITIES

1. SCOPE/EFFECT: This Medical Center Policy (MCP) affects all employees, patients and visitors.

2. PURPOSE:

a. To establish policy and procedures to ensure that construction projects will be planned, coordinated and regularly inspected to ensure compliance with applicable fire, infection control, environmental, security, safety and occupational health regulations and policies.

b. Construction activities shall be defined to include delegated minor, non-recurring maintenance projects and major projects, performed by contractors or purchase and hire personnel, as well as station-level projects performed by contractors, purchase and hire personnel or station Maintenance and Operations (M&O) personnel.

3. POLICY:

a. In order to protect patients, staff, visitors and contractors from safety and health hazards associated with construction activities, this policy is established for the VAMC, Wilkes-Barre and for all property where construction is undertaken. This policy requires that strategies be established to control the hazards inherent in conducting construction or maintenance operations in areas that are occupied by patients, visitors or healthcare staff. These strategies include the assignment of appropriate responsibility at all levels of the organization, establishing and maintaining the necessary expertise to manage an effective construction health and safety program, applying technical guidance and best practices to assist in managing the program and providing a construction safety multi-disciplinary team to oversee and enforce the application of this policy.

b. In addition, it is the intention of this construction safety program to reduce the potential for injury and illness to VA patients, employees and visitors that might result from unsafe construction activities; to increase the level of construction safety expertise of VA employees; to decrease the potential for serious Occupational Safety and Health Administration (OSHA) violations; to provide a guideline for addressing safety-related construction issues; and to reduce the potential for property and liability exposures due to construction-related activities.

c. Proper application of this program will reduce the potential for liability, which could result from construction accidents, life safety deficiencies or infection control failures.

4. PROCEDURE:

a. The medical center has established a multi-disciplinary Construction Safety Committee with representatives from the following areas:

- Infection Prevention & Control
- Patient Safety
- Occupational Safety and Health
- Police
- Engineering
- Local Union Safety Representatives (from affected bargaining units)
- Contracting
- Green Environmental Management Systems (GEMS)

b. This multi-disciplinary committee performs the following functions:

(1) Protect patients, visitors, and employees from traumatic injury, as well as occupational and facility-associated infections.

(2) Oversee compliance with OSHA and State construction safety regulations.

(3) Oversee compliance with Environmental Protection Agency (EPA) and state environmental regulations.

(4) Respond to, investigate and report violations of these policies to upper management.

(5) Meets monthly and files reports to the VAMC Safety/Environment of Care Committee quarterly.

(6) Determines the scope and depth of safety, infection control, environmental and security procedures appropriate for all construction work.

(7) Develops threshold criteria for each level of intervention. For example, after review, some projects may require only VA Competent Person surveillance to ensure employee safety and OSHA compliance, while other projects will require all disciplines to be involved.

(8) Ensures submittals for contract construction or renovation work include the names, qualifications, and training dates for the contractors' Competent Person designated to administer the site-specific safety program, as well as the Competent Person for other activities as required by OSHA regulations (such as scaffolds, cranes, excavations, etc.).

(9) Conducts Infection Control Risk Assessments (ICRA). Using the current American Institute for Architects Guidelines, the staff must conduct and document ICRA for all construction projects during the design or planning stage of the work. ICRAs must be documented in writing and focus on eliminating, or minimizing, the risk of infection during construction and renovation activities. The complexity of the ICRA report is determined by the complexity of the threats posed by the construction project.

Assigned VA staff, including resident engineers or project managers for major construction, must maintain compliance during the construction phase of the work.

(10) Identifies Interim Life Safety Measures (ILSMs). Facility Safety and Engineering staff must ensure that ILSMs are implemented on all construction work in accordance with The Joint Commission Environment of Care standards. ILSMs are required when construction activities pose significant temporary Life Safety Code deficiencies or hazards. Each medical facility must have a local policy addressing ILSMs in accordance with The Joint Commission requirements. Implementing ILSMs is the responsibility of the local medical facility and construction contractors in accordance with VA Master Specification 01010, General Requirements.

(11) Participates in all phases of construction work from planning through completion. This includes review and approval the construction plans, contract specifications, and contract submittals related to construction safety and health and any other documents that may assist in the implementation of an effective construction safety program. The Construction Safety Committee must be involved early in the process and continue oversight on a regular basis to avoid costly and disruptive delays.

(12) Ensures the construction safety program includes periodic construction site hazard surveillance activities with appropriate membership, scope, and frequency for each project as determined by the Competent Person, the ILSMs and ICRA reports, Hazard Surveillance deficiencies, type of corrective action, and time and date of correction. Ensures corrective actions are tracked to completion.

(13) Implements procedures to ensure general contractors exercise their responsibility for ensuring subcontractors comply with this safety and health policy, and all other related contract requirements.

(14) Ensures all contractors entering VA property comply with the security management program. At a minimum, contractors must notify and obtain permission of the VA Police, be identified by project and employer, and be restricted from unauthorized access.

(15) Requires the contractors' Competent Person to implement and maintain effective safety programs that identify and control hazards that may cause injury or illness to VA patients, staff, visitors, and contractor employees.

(16) Evaluates the effectiveness of the construction safety program in an annual report to the facility Safety and Environment of Care Committee, or equivalent committee.

c. General and Subcontractors Training Requirements: All on-site general and subcontracting construction workers are required to complete the OSHA 10-hour construction worker course and/or the 30-hour construction course. The determination for training is based on the project hazards and complexity, State and Federal regulations and VA requirements.

d. VA staff training requirements

(1) All appointed Competent Persons, Contracting Officer Representative (COR) and facility Safety Program Managers are required to complete OSHA's 30-hour construction safety training and maintain 10-hours of construction safety-related training every two years.

(2) Engineering Supervisors and foreman who oversee construction work complete OSHA 10-hour and 30-hours construction safety course and maintain 10-hours of construction safety-related training every two years.

(3) The construction safety training has to be documented in each person's training record.

5. RESPONSIBILITY:

a. Director, Wilkes-Barre VA Medical Center

(1) Establish and monitor an effective facility construction safety program.

(2) Insure funding is available for appropriate staff to receive training in construction safety.

(3) Develop a written facility policy addressing the responsibilities of the Construction Safety Committee.

b. Associate Director, Wilkes-Barre VA Medical Center receives delegated responsibility from the Director, Wilkes-Barre VA Medical Center, as appropriate, for oversight of these policies.

c. Chief, Facilities Management Service

(1) Receives delegated responsibility from the Associate Director, Wilkes-Barre VA Medical Center, as appropriate, for oversight of these policies.

(2) Insures policies are addressed by all sections of engineering having oversight of construction.

(3) Participates in VHA or OSHA's 30-hour Construction Safety Training and refresher courses.

(4) Nominates individual to be appointed as Construction Safety Officer (CSO) for each project.

d. Supervisory Project Engineer

(1) Chairs the Construction Safety Committee, which will meet monthly.

(2) Works through safety and health staff, CORs, maintenance staff, contractors and the Construction Safety Committee to plan, coordinate and monitor the construction safety program for all projects at the facility.

(3) Participates in VHA or OSHA's 30-hour construction safety training and refresher courses.

(4) Supports the competent person, Safety Officer, Infection Control Practitioner, Contracting Officer and engineering staff in implementation of the construction safety program.

(5) Works with contracting staff to insure competent staff are assigned as CORs to oversee work.

(6) Participates in periodic inspections of construction sites to ensure compliance with safety elements of the construction contract and performance of the program.

(7) Works with competent person, Safety Officer, Infection Control Practitioner to identify and complete the attached Pre-Construction Risk Assessment (PCRA) for each project. (Attachment B)

e. Maintenance and Operations Foreman

(1) Participates in VHA or OSHA's 30-hour construction safety training and refresher courses.

(2) Participates in periodic inspections of in-house construction sites to ensure compliance with safety elements of the construction contract and performance of the program.

(3) Insures in-house work forces have necessary training and competency for tasks being performed.

f. Supervisory Biomedical Engineer

(1) Insures all construction accomplished in support of major equipment installations (as a part of the equipment purchase) are in compliance with this policy and these procedures.

(2) Participates in VHA or OSHA's 30-hour construction safety training program and refresher courses.

g. Contracting Officer

(1) Participates in OSHA's 30-hour construction safety training and refresher courses.

(2) Ensures safety elements of this policy are included in each construction contract.

(3) Evaluates past safety records of prospective contractors and considers this information in the contract award process.

(a) At a minimum, ensures that all solicitation and contracts specify that contractors must not have more than three serious, one repeat, or one willful OSHA violations(s) in the past (3) years.

(b) Ensures that all Solicitations and contracts specify that Contractors have an Experienced Modifications Rate (EMR) of equal to or less than 1.0.

(4) Serves on the facility Construction Safety Committee/subcommittee to ensure contracts meet the committee's requirements.

(5) Supports the competent person, Safety Officer, Resident Engineer, and appropriate staff in implementing the construction safety program.

(6) Works with the Supervisory Project Engineer to assign necessary competent COR.

(7) Ensure that construction contracts awarded after July 31, 2005, specify that on-site general and sub-contractor's construction workers have completed the OSHA 10-hour construction worker course, the 30-hour construction course, or other relevant competency training, as determined by the VA CP with input from the Construction Safety Committee. The determination for training is based on the project hazards and complexity, State and Federal regulations and VA requirements.

(8) Appoints individual to be appointed as Construction Safety Officer (CSO) for each project.

h. Contracting Officer's Representative (COR)

(1) Participates in VHA or OSHA's 30-hour construction safety training program and refresher courses.

(2) Is trained and designated as a competent person for the purposes of this policy.

(3) As the team member most familiar with the technical aspects of his/her designated project, inspects his/her projects on a daily basis to identify and document deficiencies in the work including safety and infection control. Acts to correct deficiencies on-the-spot whenever possible.

(4) Participates in the VHA facility multi-disciplinary team established for construction.

(5) Consults with other members of the team, as appropriate, to assure that all deficiencies are handled properly.

(6) Consults with member of the team, during design or planning to establish the risks to be addressed and the degree of protection appropriate to the situation.

(7) Monitors compliance with relevant safety and health requirements by the contractor in the field. Completes Construction Rounds Log on a daily basis to document contractor compliance for Safety, ILSM, and Infection Control Issues. (Attachment E)

(8) Ensures that the specific safety requirements for construction operations are implemented and continuously observed during the course of all projects subject to this policy.

i. Safety and Occupational Health Manager

(1) Participates in VHA or OSHA's 30-hour construction safety training and refresher courses.

(2) Ensuring that VHA policy for the construction safety program is implemented within the Medical Center.

(3) Ensures necessary and relevant ILSMs (Interim Life Safety Measures) are established and implemented using the attached the Interim Life Safety Measures form. (Attachment C) - Conducts required additional training for compliance with identified ILSMs.

(4) Renders technical advice and assistance as required in connection with life safety and fire protection issues during construction and project design and development.

(5) Oversees compliance with OSHA and other relevant construction safety regulations.

(6) Ensures VAMC staff receives training required by this memorandum.

(7) Conducts weekly inspections of construction sites to ensure compliance with safety elements of the construction contract using the attached Job Safety Check Sheet. (Attachment A)

(8) Stops unsafe work or activities not complying with the contract or OSHA, and notifies the Contracting Officer immediately.

(9) Approves corrective actions.

(10) Ensures the construction safety program includes appropriate periodic construction site hazard surveillance.

j. Infection Prevention Nurse

(1) Advises and/or provides recommendations on exposure mitigation and the prevention of facility associated infections in patients, staff, and visitors.

(2) Coordinates with the manager of each construction project (in-house and contract) to conduct an Infection Control Risk Assessment (ICRA) during the planning and/or design stage of the work. ICRA's must be documented in writing and focus on eliminating, or minimizing, the risk of infection during construction and renovation activities using the attached Infection Control Risk Assessment form. (Attachment D)

(3) Monitors infection control during construction activities as indicated in ICRA for that project.

(4) Participates in VHA or OSHA 10 Hour Construction Safety Training and refresher courses.

k. GEMS Coordinator

(1) Provides guidance on environmental issues during design stage.

(2) Monitors contractor conformance to contract specifications, including environmental compliance and pollution prevention.

(3) Participates in VHA or OSHA 10 Hour Construction Safety Training and refresher courses.

I. Police and Security

(1) Ensures all contractors entering VAMC property comply with the security management program. At a minimum, contractors must notify and obtain permission of the VAMC Police, be identified by project and employer, and restricted from unauthorized access.

(2) Conducts periodic surveillance of site security and the integrity of barriers for trenches and other hazards.

(3) Participates in VHA or OSHA 10 Hour Construction Safety Training and refresher courses.

6. CUSTOMER SATISFACTION: Employee and patient customer satisfaction were considered in the development of this policy.

7. RESCISSION: Medical Center Policy 18S-12-346 dated September 11, 2012, same subject.

8. REFERENCES: VHA Emerging Pathogens Guidebook, 1998, Center for Engineering and Occupational Safety and Health available electronically at: <http://vaww.ceosh.med.va.gov>
National Fire Protection Association (NFPA) Standards
APIC Infection Control Tool Kit Series: Construction and Renovation available from the Association of Professional Infection Control Practitioners and Epidemiologists (APIC).
Guidelines for Design and Construction of Hospital and Health Care Facilities, American Institute of Architects, Washington DC 2014.
Guidelines on Assessment and Remediation of Fungi in Indoor Environments, New York City Department of Health, Bureau of Environmental and Occupational Disease Epidemiology, at: [http://www.lchd.org/environhealth/aq/pdfs/NYC DOH Guidelines.pdf](http://www.lchd.org/environhealth/aq/pdfs/NYC_DOH_Guidelines.pdf)
Infection Control during Construction. A Guide to Prevention and JCAHO Compliance, Wayne Hansen, Editor, Opus Communications, 2002.
OSHA Regulations for Construction Safety, 29 CFR 1926, Available at: <http://www.osha.gov>
Current JCAHO Standards from the Joint Commission on the Accreditation of Healthcare Organizations.
VHA Directive 7701, Occupational Safety and Health.
VHA Handbook 7701.1, Occupational Safety and Health Program Procedures.
VA Directive 7700, Occupational Safety and Health.
Construction Safety Council, at: <http://www.buildsafe.org>

VHA Directive 2011-036, Safety and Health during Construction Activities.

9. DISTRIBUTION: Electronic Access to All Employees.

10. ATTACHMENTS: A, B, C, D, E

Attachment A - Job Safety Check Sheet

Attachment B - Pre-Construction Risk Assessment

Attachment C - Interim Life Safety Measures

Attachment D - Infection Control Risk Assessment

Attachment E - Construction Daily Rounds Log – Safety/ILSM/Infection Control Issues

12/7/2015

X

Michael D. Adelman, MD.

Signed by: Adelman, Michael

JOB SAFETY CHECK SHEET

Company: _____ Division: _____ Date: _____

Time: _____

Job Name/Location: _____ Job Number: _____

Crew Size: _____

Type of Work: _____
 _____ Weather: _____ Temperature: _____

Inspected By: _____
 Title: _____

Inspected By: _____
 Title: _____

	No.	Grade 1 to 5 (5 is Best)	N/A	COMMENTS – Note Improvements Needed:
A. Personal Protective Equipment:				
1.		A1	1 2 3 4 5	
2.		A2	1 2 3 4 5	
3.		A3	1 2 3 4 5	
4.		A4	1 2 3 4 5	
5.		A5	1 2 3 4 5	
6.		A6	1 2 3 4 5	
B. Tools and Equipment:				
1.		B1	1 2 3 4 5	
2.		B2	1 2 3 4 5	
3.		B3	1 2 3 4 5	

- 4. Air/sandblast hoses in good condition and properly wired. **B4** 1 2 3 4 5
- 5. Compressors equipped with automatic shut-off. **B5** 1 2 3 4 5
- 6. Ladders in good condition; tied back; extended 3 ft. beyond landing. **B6** 1 2 3 4 5

C. Scaffolding: Suspended Tubular Other (***Rope Falls Not Permitted***)

- 1. Scaffold in good repair; guardrails; toe boards and wire mesh in place. **C1** 1 2 3 4 5
- 2. Counterweights marked with weight and in proper ratio. **C2** 1 2 3 4 5
- 3. Scaffold tied back and tied in. **C3** 1 2 3 4 5
- 4. Passageways under scaffold blocked. **C4** 1 2 3 4 5

D. Hazardous Chemicals/Air Contaminants:

- 1. Hazard Communication Right-To-Know poster / written program on job. **D1** 1 2 3 4 5
- 2. List of hazardous materials on job. **D2** 1 2 3 4 5
- 3. Material Safety Data Sheets. **D3** 1 2 3 4 5
- 4. Employees are familiar with program. **D4** 1 2 3 4 5
- 5. Proper containers in use with correct labels. **D5** 1 2 3 4 5

E. General:

- 1. Safe access to work area. **E1** 1 2 3 4 5
- 2. Good housekeeping and material storage. **E2** 1 2 3 4 5
- 3. Barricades/debris protection/warning signs in place. **E3** 1 2 3 4 5
- 4. Floor and wall openings properly protected. **E4** 1 2 3 4 5
- 5. Shoring properly installed; engineer’s stamped drawings on job. **E5** 1 2 3 4 5
- 6. Eye wash available. **E6** 1 2 3 4 5
- 7. Fire extinguisher: Good condition; current **E7** 1 2 3 4 5

inspection tag; within 50 ft.

- | | | | | | | |
|---|-----------|----------|----------|----------|----------|----------|
| 8. First aid: Kit and certified employees. | E8 | 1 | 2 | 3 | 4 | 5 |
| 9. Trucks: Safe/good condition; D.O.T. regulation compliance. | E9 | 1 | 2 | 3 | 4 | 5 |

F. Paperwork and Other Postings:

- | | | | | | | |
|---|-----------|----------|----------|----------|----------|----------|
| 1. OSHA poster/log. | F1 | 1 | 2 | 3 | 4 | 5 |
| 2. Emergency phone number card. | F2 | 1 | 2 | 3 | 4 | 5 |
| 3. Drug-Free Workplace Policy Summary and poster (if applicable). | F3 | 1 | 2 | 3 | 4 | 5 |
| 4. Job logs and Job Safety Check Sheets. | F4 | 1 | 2 | 3 | 4 | 5 |
| 5. Site-Specific Safety Plan (if applicable). | F5 | 1 | 2 | 3 | 4 | 5 |

Pre-Construction Risk Assessment		
Infection Control and Safety Construction Permit		
Location of Construction:	Project Start Date:	
Project Coordinator:	Estimated Duration:	
Contractor Performing Work:	Permit Expiration Date:	
Supervisor:	Telephone:	
Description of Project:		
Construction Activities:		
The following projects /activities do not require completion of the Pre-Construction Risk Assessment form:		
1. Paint and wallpaper in business offices and non-patient areas.		
2. Paint in patient room if closed for painting and less than 3 sq. ft. of wall needs patched. Filter for room unit changed after painting.		
3. Installation of soap dispenser/needle box/paper towel holder in patient room.		
4. Repair of window blind.		
5. Ceiling tile replacement for areas less than 50% of the total square footage of the room in Risk Group I areas.		
6. Ceiling tile replacement for area less than (5) 2 X 2 tiles in a patient area if patient is out of the immediate area and clean up can be accomplished before patient returns.		
7. Minimum repair of nurse call system/TV/Bed/Telephone.		
8. Check or replace electric outlet.		
9. Replace light bulb.		
10. Unstop sink/commode with no water on floor.		
11. Unstop commode when water on floor requires maintenance to have Housekeeping clean area immediately.		
12. Repair medical gas outlet. (Front Body)		
13. Air balance readings.		
14. Check air-conditioning.		
UTILITY SHUTDOWNS		
Yes	No	
		Will temporary shutdown of any utilities or systems be required?
		<i>(All shutdowns must be scheduled not less than 10 days in advance through FES. Confirmation is required by all departments: FES, Safety, Fire Chief, and others if identified.)</i>
		• Fire alarm – <i>(If out for more than 4 hours, Interim Life Safety Measures must be implemented.)</i>
		• Sprinkler – <i>(If out for more than 4 hours, Interim Life Safety Measures must be implemented.)</i>
		• Electrical
		• Domestic water
		• Oxygen
		• Sewage
		• HVAC
		• Other (Specify)
		Is this an emergency shutdown for repairs?

SAFETY / ENVIRONMENTAL		
Yes	No	
		Are Emergency Procedures in place and posted on each job for accidental events that could greatly impact Patient Care or Life Safety to the facility? Included in these procedures are such things as:
		<ul style="list-style-type: none"> • Emergency telephone numbers of emergency responders and key departments.
		<ul style="list-style-type: none"> • A plan that indicates the locations of main valves, switches and controls for the area in case of an emergency. • A contingency plan for unexpected utility outages.
		Will any work require implementation of the Interim Life Safety Measures (ILSM) during this project per JCAHO requirements? Actions for which ILSM's must be implemented include but are not limited to:
		<ul style="list-style-type: none"> • Any construction that impacts an egress path from an area, an EXIT or stairs • Any construction that breaches fire or smoke-rated walls or enclosures • Taking the main fire protection system out of service (sprinkler) • Taking the main fire alarm system out of service • Taking any "area" fire-detection or fire alarm system out of service for more than 4 hours within a 24-hour period
		Implementation of the ILSM requires a fire watch and the ILSM forms to be completed (forms are to be obtained from the Safety Office)
		Will the project affect pedestrian or vehicular traffic patterns in area? Attach a proposed plan showing how traffic flow will be maintained during each phase of construction. Include locations and types of temporary traffic, directional, information and egress signage as required. Include signage in Contract for construction projects.
		Prior to any construction activities, the following must be completed:
		<ul style="list-style-type: none"> • Separation wall must be constructed. (Applies to any required separation – fire/safety, environmental or infection control) • Fire protection systems must remain functional. • Provide fire extinguishers in all work areas in accordance with OSHA and NFPA requirements. • Maintain exit signs and lights in all work areas. • Provide new exit signs and emergency egress lighting for all areas outside of the construction area where means of egress, exit path or signage have been modified or obscured by construction separations in accordance with Code requirements. • Attach signs reading, "Construction Area – Do Not Enter", to the outsides of doors at all construction area entrances. • Adhere to all Infection Control requirements indicated below.
		Maintain a clean and orderly work area.
		Will any of the following environmental hazards be present?
		<ul style="list-style-type: none"> • Hazardous chemicals – Identify how fumes and odors will be controlled. MSDS Sheets are required. • Asbestos / abatement – Notify Safety and FES prior to any work activities. • Silica – If concrete block will be cut, review requirements with Safety and the COTR.
		Will there be hot work done on this project?
		<ul style="list-style-type: none"> • If so, then a current Hot Work Permit must be posted on the job site and daily inspection logs maintained. • All hot work must have a fire watch assigned to each area while the hot work is being performed and until 30 minutes after completion (or 2-hours after completion for torch-applied roofing).
		Will noise or vibration be generated that will impact a department adjacent to, above, or below the construction area?
		<ul style="list-style-type: none"> • If so, Safety and FES must be notified and the work must be scheduled in coordination with the affected Departments.

		<ul style="list-style-type: none"> • How will the noise / vibration be reduced to an acceptable level?
		<p>Will a Confined Space Entry be required on this project? If so, the Medical Center’s confined space entry program must be followed.</p>
<p>INFECTION CONTROL</p>		
<p>The minimum required Infection Control (IC) prevention measures are listed for each of four classifications. An IC prevention measure classification must be assigned for each construction/work area. This assigned classification is based upon two factors: (1) Construction Activity Type and (2) the Risk Group of the surrounding occupancies. The Construction Activity Types are defined by the anticipated amounts of dust generated. The Risk Groups categorize departments/functions based on their risk for infection or contamination due to the airborne particles and micro-organisms. Contact the Safety Office and the Infection Control Coordinator if any activity is questionable under these guidelines.</p>		
<p>Construction Activity Type <i>(complete the following itemized list)</i></p>		
Yes	No	
		<p>Type A – Inspections and Non-Invasive Activities</p> <ul style="list-style-type: none"> • Removal of ceiling tiles for visual inspection (limited to < 10% of total area) • Painting (limited sanding to <10% of area) • Wall covering—Describe work to be done: • Electrical trim work. Describe: • Minor plumbing. Describe:
		<p>Type B – Small scale, short duration activities that create minimal dust</p> <ul style="list-style-type: none"> • Installation of telephone and computer cabling • Access to chase spaces through access doors/panels • Sanding of walls for painting or wall covering (minor repairs only – not sanding for drywall finishing)
		<p>Type C – Activities that generate moderate to high dust levels / Removal of fixed building components or assemblies</p> <ul style="list-style-type: none"> • Sanding of walls (>50% of surface area) – including drywall finishing • Removal of <input type="checkbox"/> floor coverings <input type="checkbox"/> ceiling tiles <input type="checkbox"/> casework (>50% of surface area) Describe: • Cutting of walls or ceiling. Describe: <p><i>(Note that concrete/concrete block cutting requires special attention due to Silica dust exposure.)</i></p> <ul style="list-style-type: none"> • New wall construction • Minor ductwork or electrical work above ceilings • Major cabling activities • Activity cannot be completed within a single work shift
		<p>Type D – Major demolition and construction activities</p> <ul style="list-style-type: none"> • Consecutive work shifts • Heavy demolition or removal of a complete ceiling system • New construction

Permit Request By (please print)	Safety Office Approval	Infection Control Coordinator Approval
Date:	Date:	Date:

**INTERIM LIFE SAFETY MEASURES (ILSM) EVALUATION SHEET
For Deficiencies or Conditions as a Result of Construction**

Project No. _____

Date: _____

Project Title: _____

The following ILSM will be evaluated individually and initiated as needed to compensate for deficiencies or conditions as a result of construction. ILSM implementation will be documented on Attachment C.

1. Ensuring free and unobstructed exits. Buildings or areas under construction must maintain escape routes at all times for all occupants including construction workers. Affected personnel will be trained on any designated alternate exits. (Attachment B, Column A.) Exits in construction areas will be inspected daily.

Will any exits be obstructed or compromised? Yes No N/A

If **yes** then:

a. Did the COR coordinate and document that affected personnel received training on alternate routes and exits? Yes No N/A

b. Does the construction area(s) have designated and marked exit? Yes No N/A

c. Are construction areas inspected daily to ensure exits are clear? Yes No N/A

2. Ensuring free and unobstructed access to emergency services such as fire department, police etc. Every building and area will remain accessible and roadways will be maintained unobstructed within 20 feet of all buildings. (Attachment B, Column B.)

a. Were the construction plans reviewed to maintain access for emergency services? Yes No N/A

b. Were the construction areas inspected daily and results recorded? Yes No N/A

c. If necessary, were outside emergency services notified about the construction? (Attachment B, Column C.) Yes No N/A

d. Were VA Police notified? Yes No N/A

Ensuring that fire alarm, detection and suppression systems are in good working order. A temporary, equivalent system will be provided when any fire system is impaired. Temporary systems will be inspected and tested monthly and results recorded. (Attachment B, Column D.)

Note: The Life Safety Code, NFPA 101, requires that the municipal fire department be notified and a fire watch be provided whenever an approved fire alarm system is out of service for more than four (4) hours in a 24-hour period in an occupied building, or automatic sprinkler system is out of service for more than twelve (12) hours in a 24-hour period in an occupied building.

Will any fire systems be impaired? Yes No N/A

If yes then:

a. Are temporary systems inspected and tested monthly & results recorded?

Yes No N/A

3. Ensuring that temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire. (Attachment B, Column E.)

a. Was the contractor briefed at pre-construction conference? Yes No N/A

b. Are areas inspected daily and deficiencies recorded? Yes No N/A

4. Providing additional fire-fighting equipment and training staff in its use. Evaluate the impact to emergency response teams and provide notification, if necessary. (Attachment B, Column F & G.)

Will additional fire-fighting equipment be needed? Yes No N/A

If yes then:

a. Was additional training conducted and documented? Yes No N/A

b. Were code teams notified? Yes No N/A

c. Was the fire department notified? Yes No N/A

d. Was the contractor briefed at the pre-construction conference of the need to provide adequate fire-fighting equipment and to train the construction workers?

Yes No N/A

5. Prohibiting smoking throughout the medical center buildings and in and near the construction areas. Smoking is only allowed in designated areas. The contractor will be briefed on the medical center's smoking policy at the pre-construction meeting. (Attachment B, Column H.)

Was the contractor briefed on the medical center's smoking policy?

Yes No N/A

6. Developing and enforcing storage, housekeeping, and debris removal practices that reduce the flammable and combustible fire load of the building to the lowest feasible level. (Attachment B, Column I)

a. Was the contractor briefed at the pre-construction conference of the storage and housekeeping requirements?

Yes No N/A

b. Are areas inspected daily and results recorded?

Yes No N/A

7. Conducting a minimum of two fire drills per shift per quarter. The COR will inform the Safety Manager of the need to conduct more fire drills. The Safety Manager will assume responsibility for completing the drills. (Attachment B, Column J)

a. Are fire drills being conducted as necessary?

Yes No N/A

b. Are any additional drills required?

Yes No N/A

8. Increasing hazard surveillance of buildings, grounds, and equipment with special attention to excavations, construction areas, construction storage, and field offices. (Attachment B, Column K.)

a. Are areas inspected daily and results recorded in a daily log?

Yes No N/A

- Means of egress are clear in construction areas.
- Access for the fire department and emergency services is clear.
- Note the status of fire detectors and sprinkler systems.
- Construction partitions are being maintained.

- Good housekeeping practices are being used in construction areas.
- Flammable and combustible fire loads are being kept to a minimum.
- Buildings, grounds, and equipment are being maintained in a safe manner.
- Smoking regulations are being enforced.

9. Training staff to compensate for impaired structural or compartmentalization features of fire safety. (Attachment B, Column L.)

a. Was all the required staff training completed? Yes No N/A

10. Conducting organization-wide safety education programs to promote awareness of any life safety building deficiencies, construction hazards, and ILSM. (Attachment B, Column M.)

a. Was all the necessary information provided? Yes No N/A

		A	B	C	D	E	F	G	H	I	J	K	L	M
	Deficiencies or Conditions as a Result of Construction	Ensuring Egress	Emergency forces access	Emergency forces notification	Ensuring operational life safety systems (Provide fire watch if necessary)	Temporary construction barriers	Additional fire fighting equipment	Conducting additional training of incident response team	Prohibiting Smoking	Controlling combustible loading	Conducting 2 fire drills per shift in all areas	Increased hazard surveillance	Compartmentation training of personnel	Conducting organizational training on life safety
1	Door locked against egress			X	X				X	X		X	X	
2	Lacking a code complying smoke barrier							X	X				X	
3	Fire exit stairs discharge improperly			X				X	X		X		X	X
4	Excessive travel distance to an approved exit								X	X		X	X	
5	Lack of two remote exits							X	X	X		X	X	
6	Nonconforming building construction type						X		X	X	X	X		X
7	Improperly protected vertical openings								X	X			X	
8	Large penetrations in fire/smoke barriers							X	X	X		X		
9	Corridor walls do not extend to the structure								X	X		X	X	
10	Hazardous areas not properly protected								X	X				
11	Blocking off an approved exit	X		X	X			X	X	X		X	X	
12	Rerouting of traffic to Emergency Room		X	X					X					
13	Major renovation of an occupied floor	X			X	X	X		X	X		X	X	
14	Replacing fire alarm system (out-of-service)			X	X			X	X	X		X		
15	Installing sprinkler system (out-of-service)			X	X		X		X	X		X		X
16	Significantly modifying smoke/fire barrier walls					X			X	X		X	X	
17	Adding an addition to an existing structure	X	X	X	X	X		X	X					X
18	Taking a fire alarm system out-of-service			X	X			X	X					
19	Taking a sprinkler system out-of-service			X	X			X	X					
20	Disconnecting alarm devices			X	X				X					

Description of Interim Life Safety Measures Used

Based on the responses to the evaluation questions, provide a description of the Interim Life Safety Measures that will be implemented during the project to compensate for the deficiency or condition. Attach additional sheets if necessary.

[Ruled lines for text entry]

Signatures required as indicated below. Completed form will be maintained in the Project file.

Project COR: _____

Date: _____

Reviewers:

1. Safety Manager: _____

Date: _____

2. Chief Engineer: _____

Date: _____

Infection Prevention Risk Assessment Matrix of Precautions for Construction & Renovation

Step One:

Using the following table, identify the **Type of Construction Project Activity (Type A-D)**

TYPE A	<p>Inspection and Non-Invasive Activities. Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet ▪ painting (but not sanding) ▪ wallcovering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
TYPE B	<p>Small scale, short duration activities which create minimal dust Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ installation of telephone and computer cabling ▪ opening of no more than 1 tile per 10 square feet ▪ access to chase spaces ▪ cutting of walls or ceiling where dust migration can be controlled. ▪ minor renovation of existing space ▪ wet sanding of walls ▪ floor covering removal (without sanding or grinding)
TYPE C	<p>Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ dry sanding of walls for painting or wall covering ▪ removal of floor coverings (with sanding), ceiling tiles and casework ▪ cutting of walls, removal of drywall or building finishes where work is limited to one room or suite ▪ new wall construction ▪ minor duct work, plumbing work, or electrical work above ceilings (not including system demolition or installation) ▪ moderate renovation of existing space ▪ major cabling activities ▪ any activity which cannot be completed within a single work shift.
TYPE D	<p>Major demolition and construction projects Includes, but is not limited to:</p> <ul style="list-style-type: none"> ▪ activities which require the closure of a unit/wing or relocation of an entire area ▪ activities which require consecutive work shifts ▪ demolition, removal, or installation of a complete cabling, HVAC, plumbing, medical gas, or electrical system ▪ demolition of major fixed building components, assemblies, fit-out elements, or structural elements ▪ new construction located in close proximity (as determined by the ICRA team) of the hospital building ▪ outdoor construction of new structures located in close proximity to existing patient care facility ▪ excavation activities within close proximity of hospital building. ▪ new construction.

Step Two:

Using the following table, *identify the Patient Risk Groups* that will be affected.

If more than one risk group will be affected, select the higher risk group:

Low Risk	Medium Risk	High Risk	Highest Risk
<ul style="list-style-type: none"> ▪ Office areas ▪ Mechanical spaces 	<ul style="list-style-type: none"> ▪ Cardiology ▪ Echocardiography ▪ Endoscopy ▪ Nuclear Medicine ▪ Physical Therapy ▪ Radiology/MRI/CT/PET ▪ Respiratory Therapy ▪ Primary care spaces ▪ Community Based outpatient clinics 	<ul style="list-style-type: none"> ▪ Emergency Room ▪ Laboratories (specimen) ▪ Outpatient Surgery ▪ Pediatrics ▪ Pharmacy ▪ Post Anesthesia Care Unit ▪ Surgical Units ▪ Central Sterile supply storage ▪ Canteen/Kitchen 	<ul style="list-style-type: none"> ▪ Any area caring for immunocompromised patients ▪ Cardiac Cath Lab ▪ Sterile Processing ▪ Intensive Care Units ▪ Medical Units ▪ Negative pressure isolation rooms ▪ Oncology ▪ Operating rooms ▪ PACU ▪ Community Living Center

Step 2 _____

Step Three: Match the

Patient Risk Group (*Low, Medium, High, Highest*) with the planned ...

Construction Project Type (*A, B, C, D*) on the following matrix, to find the ...

Class of Precautions (*I, II, III or IV*) or level of infection control activities required.

Class I-IV or Color-Coded Precautions are delineated on the following page.

IC Matrix - Class of Precautions: Construction Project by Patient Risk

Patient Risk Group	Construction Project Type			
	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group	I	II	II	III/IV
MEDIUM Risk Group	I	II	III	IV
HIGH Risk Group	I	II	III/IV	IV
HIGHEST Risk Group	II	III/IV	III/IV	IV

Note: Infection Prevention approval will be required when the Construction Activity and Risk Level indicate that **Class III** or **Class IV** control procedures are necessary.

Step 3 _____

Description of Required Infection Prevention Precautions by Class
During Construction Project **Upon Completion of Project**

CLASS I	<ol style="list-style-type: none"> 1. Execute work to minimize the rise of dust from construction operation. 2. Immediately replace any ceiling tile displaced for inspection. 	<ol style="list-style-type: none"> 1. Clean work area upon completion of task.
CLASS II	<ol style="list-style-type: none"> 1. Provides active means to prevent air-borne dust from dispersing into atmosphere (surrounding environment.) 2. Water mist work surface to control dust while cutting 3. Seal unused doors with duct tape. 4. Block off and seal duct vents. 5. Wipe surfaces with disinfectant. 6. Contain construction waste before transport in tightly covered containers. 7. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 8. Place dust mat at entrance and exit of work area. 9. Remove or isolate HVAC system in area where work is being performed. 	<ol style="list-style-type: none"> 1. Wipe work surfaces with disinfectant. 2. Contain construction waste before transport in tightly covered containers. 3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 4. Remove isolation of HVAC system in areas where work is being performed.
CLASS III	<ol style="list-style-type: none"> 1. Obtain infection control permit before construction begins. 2. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 3. <u>Complete all critical barriers or implement control cube method before construction begins.</u> 4. <u>Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.</u> 5. Remove or isolate HVAC systems in area where work is being performed. 6. Do not remove barriers from work site until complete and project is thoroughly cleaned by EMS. 7. Vacuum work with HEPA filtered vacuum. 8. Wet mop with disinfectant. 9. Remove barrier material carefully to minimize spreading of dust and debris associated with construction. 10. Contain construction waste before transport in tightly covered containers. 11. Cover transport receptacles or cart and tape covering in place. 	<ol style="list-style-type: none"> 1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention Coordinator and thoroughly cleaned by (EMS) Environmental Management Services. 2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with disinfectant. 5. Remove isolation of HVAC system in areas where work is being performed.
CLASS IV	<p>Same as Class III plus the following:</p> <ol style="list-style-type: none"> 1. Seal holes, pipes, conduits and penetrations appropriately. 2. Construct anteroom & require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving worksite or they can wear cloth or paper coveralls that are removed each time they leave the work site. 3. <u>Wear shoe covers when within entering work site.</u> 	<p>Same as above plus:</p> <ol style="list-style-type: none"> 1. Contain construction waste before transport in tightly covered containers. 2. Cover transport receptacles or carts. Tape covering unless solid lid 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with disinfectant.

Step 4. Identify the areas surrounding the project area, assessing potential impact

Unit Below	Unit Above	Lateral	Lateral	Behind	Front
Risk Group	Risk Group	Risk Group	Risk Group	Risk Group	Risk Group

Step 5. Identify specific site of activity e.g., patient rooms, medication room, etc.

Step 6. Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages. _____

Step 7. Identify containment measures, using prior assessment. What types of barriers? (E.g., solids wall barriers); Will HEPA filtration be required?

(Note: Renovation/construction area shall be isolated from the occupied areas during construction and shall be negative with respect to surrounding areas)

Step 8. Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (e.g., wall, ceiling, roof)

Step 9. Work hours: Can or will the work be done during non-patient care hours?

Step 10. Do plans allow for adequate number of isolation/negative airflow rooms?

Step 11. Do the plans allow for the required number & type of handwashing sinks?

Step 12. Does the infection control staff agree with the minimum number of sinks for this project? (Verify against AIA Guidelines for types and area)

Step 13. Does the infection control staff agree with the plans relative to clean and soiled utility rooms?

**Step 14. Plan to discuss the following containment issues with the project team.
E.g., traffic flow, housekeeping, debris removal (how and when),**

Appendix: Identify and communicate the responsibility for project monitoring that includes infection control concerns and risks. The ICRA may be modified throughout the project. Revisions must be communicated to the Project Manager

Infection Prevention Construction Permit

<p>Construction Class: I, II, III, IV</p> <p>Project Name and Number:</p> <p>Location of Construction:</p> <p>Contractor Performing Work:</p> <p>FMSS Project Engineer:</p>	<p>Type: A, B, C, D</p>	<p>Risk Group: Low, Medium, High, Highest</p> <p>Permit #:</p> <p>Project start date:</p> <p>Estimate completion date:</p> <p>Telephone:</p>
<p>Type A: Inspection and non-invasive activities, minimal dust levels Type B: Small scale, short duration moderate dust level Type C: Generates moderate to high levels of dust Type D: Major duration and construction activities requiring consecutive work shift</p>		
CLASS I	<ol style="list-style-type: none"> 1. Work performed is limited to inspections and minor installations. 2. Execute work by methods to minimize raising dust from inspection operations. 3. Immediately replace ceiling tiles displaced for visual inspection. Only 3-5tiles may be removed at one time 4. Permit does not need to be posted for this classification. 	
CLASS II	<ol style="list-style-type: none"> 1. Obtain and post infection control permit at work location before work begins. 2. Provide active means to prevent air borne dust from dispersing into atmosphere. 6 mil/fire resistant poly (plastic) barrier at entrance for short term work. Water mist work surfaces to control dust while cutting or use vacuum device. 3. Place dust mat at entrances and exits of work sites. Seal unused doors with tape. 4. Isolate HVAC and seal/cover air vents. 5. Contain construction waste before transport in tightly covered containers using assigned exit route. 6. Wipe surfaces with disinfectant. Wet mop and/or vacuum with HEPA filtered vacuum before leaving. 	
CLASS III	<ol style="list-style-type: none"> 1. Obtain and post infection control permit at work location before work begins. 2. Follow all requirements listed for Class II in addition to requirements listed below. 3. Isolate HVAC supply and return ductwork to prevent contamination of system. 4. Complete all critical dust barriers (hard wall) as well as the creation of an anti-room where required for inspection by ICRA Inspection Team (Safety Officer, IC Nurse, Project Engineer) before work begins. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Change filters 6. Vacuum work area with HEPA filtered vacuums. Wet mop with disinfectant. 7. Obtain ICRA Inspection Team approval before construction and prior to removal of any dust partitions 8. Contain construction waste before transport in tightly closed containers using the assigned exit route. 	
CLASS IV	<ol style="list-style-type: none"> 1. Obtain and post infection control permit at work location before work begins 2. Follow all requirements listed for Class II & III in addition to requirements listed below 3. Isolate HVAC supply and return ductwork to prevent contamination of system. 4 Complete all critical dust barriers (hard wall barrier) as well as the creation of an anti-room where required. All personnel entering and leaving work site must be vacuumed using a HEPA filtered vacuum cleaner or wear cloth or paper coveralls and shoe covers that are removed each time they leave the work site. 5. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. Change filters regularly. Seal holes, pipes, conduits and punctures appropriately. 6. Wet mop with disinfectant. Vacuum work area with HEPA filtered vacuums. 7. Contain construction waste before transport in tightly closed containers using the assigned exit route. 	
Additional Requirements:		
Infection Prevention Coordinator:		Date:
Safety Officer:		Date:
FMS Project Engineer:		Date:

INFECTION PREVENTION CONSTRUCTION CHECKLIST

Location: _____ **Date:** _____

Project COTR: _____

Safety Representative: _____

Infection Prevention Coordinator: _____

Contractor Performing Work: _____

CONSTRUCTION ACTIVITY:	YES	NO
Type A: Inspection and non-invasive activities, minimal dust levels	<input type="checkbox"/>	<input type="checkbox"/>
Type B: Small scale, short duration moderate dust levels	<input type="checkbox"/>	<input type="checkbox"/>
Type C: Generates moderate to high levels of dust	<input type="checkbox"/>	<input type="checkbox"/>
Type D: Major duration and construction activities requiring consecutive work shift	<input type="checkbox"/>	<input type="checkbox"/>

INFECTION PREVENTION RISK GROUPS:

Low Risk: _____

Medium Risk: _____

High Risk: _____

Highest Risk: _____

Scope of work: _____

Date: _____ Location: _____ Class of Precautions: _____

BARRIERS:

YES

NO

Construction signs posted for the area

- Construction site- DO NOT ENTER
- Emergency contact information
- Infection Control Instructions

Door properly closed and sealed

Floor mats/dust tacks mats at entrance and changed

Floor area clean, no dust tracked

Barrier intact

Door sweep

Door closure device

Door/tools locked when no one in area

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

AIR HANDLING

All windows closed behind barrier

Negative air at barrier entrance

Negative air machine running

Hepa filter below 2 (above 2 filter change)

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

PROJECT AREA:

Debris removed in covered container daily

Debris removed via designated exit route

Trash in appropriate container

Routine clearing done on job site

If chute used, it is not adjacent to open windows or HVAC air intakes

HVAC systems isolated, return ducts covered

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

TRAFFIC CONTROL:

Restricted to construction workers and necessary staff only

All doors and exits free of debris

ID badges worn and visible by construction workers

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Signatures:

Project COTR: _____

Safety Representative: _____

Infection Prevention: _____

Construction Daily Rounds Log - Safety / ILSM / Infection Control						
Signature of Construction Superintendent						
Signature of Project Manager (COR)						
Signature of Person doing Rounds						
Project Title		Name of Contractor				
Station		Contract Number				
Area		Project Number				
Project COTR						
Check only if no problems are noted. If issues are found annotate on this form.						
Safety / ILSM / IC Issue	M	T	W	Th	F	Coments
Subcontractors are trained in safety/environmental issues.						
Means of egress is clear in construction and adjacent areas.						
Construction exits designated during construction?						
Doors are closed to construction site and proper signage is in place						
Access for the fire department and emergency services is clear						
Fire suppression and/or fire alarm system are active, or are temporary systems/measures are in place						
Fire extinguishers are readily available in construction area						
Area is secured from public and at the end at end of day						
Are smoking regulations being followed						
Exterior balconies, corridors and stairways are clear of storage						
Flammables and combustibles kept to a minimum and in proper containers. SDS are maintained on site and all product are labeled						
Gas cylinders properly stored						
Lock out/tag out policy in place and being followed						
Building, grounds and equipment and maintained in a safe manner						
Hard hats are used per protocols						
Extension cords protected/disconnected at end of day.						
Exterior storm drain flushed and cleaned of debris.						
Floor Penetrations properly marked and protected						
Construction storage area maintained and secured						
Dust barriers are maintained, secured and tested. Barriers are monitored consistently for integrity and NPV airflow (Clean to Dirty)						
Negative air ventilation in work area is maintained utilizing HEPA equipped air filtration						
Pressure gages checked and show neg. air pressure in construction						
Compliance with traffic patterns for both construction workers and debris movement						
Windows and doors are properly closed and sealed to prevent circulation of dust, debris and inclement weather.						
Walk off mats are provided and changed when needed by the						
All adjacnet areas are cleaned daily and more often as needed by contractor of EMS						
There are no signs of water leakage						
There are no signs of pest						
All construction debris is transported in tightly covered containers						
Emergency numbers are posted.						