Department of Veterans Affairs
VA Medical Center
Marion, Illinois

Medical Center Memorandum 001-001S-13-688
October 8, 2013

CONSTRUCTION SAFETY

1. **PURPOSE:** To establish policy and procedures to maintain a safe and healthy worksite for staff, volunteers, visitors, contractors and the general public. This policy also ensures 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.

2. **POLICY:**

a. **In order to protect patients, staff, visitors and contractors** from safety and health hazards associated with construction activities, this policy requires that strategies be established to control the hazards inherent in conducting construction or maintenance operations in areas that are occupied by all customers. 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 committee to oversee and enforce the application of this policy.

b. **Construction activities shall be defined** to include delegated minor or non-recurring maintenance projects performed by contractors, as well as station-level projects performed by contractors or Engineering personnel. Construction shall also include non-delegated projects including major construction, and the Medical Center shall coordinate those construction impacts with the project's Resident Engineer through the Chief Engineer or his/her designee. This definition also applies to enhanced-use and lease projects related to structures for which the VAMC maintains management responsibility or authority.

c. **The intention of this construction safety program** is 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 guidelines for addressing safety-related construction issues; and to reduce the potential for property and liability exposures due to construction-related activities

3. **ACTION:**

a. **Responsibilities**

(1) **The Construction Safety Committee membership** is comprised of the following:

Safety and Occupational Health Specialist	Chairman
Engineering	Member
Infection Control Nurse	Member

Patient Safety Manager	Member
Infection Control Risk Assessment Coordinator	Member
IH/Safety Manager	Member
Green Environmental Management Systems (GEMS)	Member
Emergency Planning	Member
Local Union Representative	Member
Occupational Health	Member
Engineering (Project Management)	Member
Designated Construction Safety Officer	Member
VA Police	Member
VISN Contracting	Member

(2) **All members** of the Construction Safety Committee are required to complete either the OSHA 30 or 10 hour(s) of the Construction Safety Course.

(3) **The Construction Safety Committee** is responsible for the following:

(a) Determining the scope and depth of safety, infection control, emergency management, and security responsibilities as appropriate for all construction work.

(b) Confirming compliance with applicable regulations, standards, and policies during the construction phase of the work.

(c) Conducting pre-construction risk assessments to assess all hazards that affect health care, treatment, and services. Risk assessments will be conducted in the following areas:

1. Transmission of Tuberculosis (TB) to the contract construction workers based on the site location, patient population, hospital layout, and the defined risk as identified by the Center for Disease Control (CDC).

2. Site Exposure (See Attachment C)

3. Infection Control

4. Interim Life Safety

(d) Oversees and enforces the application of this policy.

(e) Evaluates the effectiveness of the construction safety program in an annual report to the Hospital's Environment of Care Committee.

(4) **Chief, Engineering Service:**

(a) Ensures that construction activities performed by contractors and Engineering employees comply with this policy.

(b) Ensures designated Competent Persons (CPs) have the necessary training, experience and authority to carry out their responsibilities with respect to safety and health during construction

activities. *Note: The designated competent person shall be defined by OSHA Title 29 Code of Federal regulations.*

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

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

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

(f) Supports the CPs, Safety Officer, Infection Control Practitioner, Contracting Officer and Engineering staff in implementation of the construction safety program.

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

(6) **Operations and Maintenance Section Supervisor:**

(a) Serves as the competent person for all related in-house construction activities.

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

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

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

(7) **Biomedical Engineering Section Supervisor:**

(a) Ensures 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.

(b) Participates in OSHA's 10-hour construction safety training program and refresher courses.

(8) **Contracting Officer (CO):**

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

(b) Requests past safety records of prospective contractors for evaluation by Safety Office.

(c) Supports the CP, Safety Officer, Resident Engineer, and appropriate staff in implementing the construction safety program

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

(9) **Contracting Officer's Representative (COR):**

(a) Is trained and designated as a CP for the purposes of this policy.

(b) As the team member most familiar with the technical aspects of his/her designated project, inspects his/her projects on a regular basis to identify and document deficiencies in the work including safety and infection control. Acts to correct deficiencies whenever possible and coordinate with CO when contractual concerns are involved.

(c) Reports all deficiencies to the Construction Safety Committee whether corrected or not.

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

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

(f) Monitors compliance with relevant safety and health requirements by the contractor in the field.

(g) Reviews project design submissions to assure project compliance with these policies.

(h) Monitors and inspects construction and renovation work sites periodically to ensure compliance with polices and safety elements of the construction contract.

(i) Maintains competence in the general inspection of work sites during construction, renovation and maintenance, which fall under the purview of this policy.

(j) Maintains a high level of competency when serving as a Competent Person for VA staff performing any construction activities.

Note: The VA CP does not take the place of the contractor's competent person nor acts on their behalf. The VA CP determines if the contractor is meeting VA standards and contractual requirements for safety and OSHA compliance. When these standards and contract requirements are not being met, the VA Contracting Officer's Representative (COR) and/or CP must take immediate action to prevent injury, non-compliance, and/or property damage.

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

(l) Approves corrective actions.

(m) Stops unsafe work or activities non-compliant with the contract or OSHA and notifies the Contracting Officer immediately.

(n) Communicates mainly with the contractor CP on questions of safety.

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

(10) **Safety Office Staff:**

(a) Chairs the Construction Safety Committee.

(b) Ensures necessary and relevant ILSMs (Interim Life Safety Measures) are established and implemented. Provides technical assistance and/or conducts required additional training for compliance with identified ILSMs.

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

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

(e) Conducts periodic construction site hazard surveillance inspections.

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

(g) Reviews and approves minutes of the Construction Safety Committee. Minutes are reported to the Environment of Care Committee.

(h) Stops unsafe work or activities non-compliant with the contract or OSHA and notifies the Contracting Officer immediately.

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

(11) **Infection Control:**

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

(b) Coordinates with the COR 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. ICRAs must be documented in writing and focus on eliminating, or minimizing, the risk of infection during construction and renovation activities. COR will relay details of ICRAs to the Contracting Officer (CO) during the project planning stage.

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

(d) Participates in OSHA's 10-hour construction safety training and refresher courses.

(12) **Police Service:**

(a) Addresses security issues and develops control strategies related to construction activities.

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

(c) Participates in OSHA's 10-hour construction safety training and refresher courses.

(13) **Emergency Preparedness:**

(a) Provides guidance on OSHA regulations as they apply to emergency planning, response, and operations in construction.

(b) Participates in OSHA's 10-hour construction safety training and refresher courses.

(14) **GEMS Coordinator:**

(a) Provides guidance on EPA regulations that directly and immediately relate to the impacts that the project may have on the environment during the design or construction stage of the project.

(b) Participates in OSHA's 10-hour construction safety training and refresher courses.

b. **Procedures:** The Construction Safety Committee:

(1) **Meets monthly,** or at the call of the committee chair, to discuss construction projects upcoming or in progress to review and documents safety issues with construction activities.

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

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

(4) **When necessary, participates in** construction and safety planning. The Construction Safety Committee will be involved early in the process and offer comments and suggestions to the CO and COR on items related to safety and construction safety issues.

(5) **Ensures** the construction safety program includes weekly inspections of active construction sites with appropriate membership and scope for each project. Hazard surveillance activities must

be documented with date, members of the inspection team, deficiencies, and type of corrective action. Ensures corrective actions are tracked to completion. (See Attachment B)

(6) **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.

(7) **Ensures all contractors** entering VA property comply with the VAMC's Security Management Program. As a minimum, contractors must notify and obtain permission from VA Police, be identified by project and employer, and be restricted from unauthorized access.

(8) **Requires** the contractors' CPs 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.

(9) **Ensures** that VA staff receives training as follows:

(a) Chief Engineer, Assistant Chief Engineer, Appointed CPs, Project Engineers, Contracting Officer's Representatives (CORs) and facility Safety Staff must complete OSHA's 30-hour construction safety course.

(b) All other members of the Construction Safety Committee must complete OSHA's10-hour Construction Safety course.

(c) Ensures 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.

4. **DEFINITIONS:** VA Competent Person (CP): The competent person includes but is not limited to: Safety Staff, Resident Engineers, Chief Engineering Service, Assistant Chief Engineering Service, COR, Maintenance & Operations Supervisor, Bio-Medical Supervisor, or other designated personnel who have received the OSHA 30 Construction Safety.

5. **REFERENCES:** VHA Construction Safety Guidebook, 2012, Center for Engineering and Occupational Safety and Health available electronically at: Http://vaww.ceosh.med.va.gov; National Fire Protection Association (NFPA) Standards; (Note: Current NFPA Standards are available in Safety and Project Section Offices); 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 7701.01, Occupational Safety and Health Program Procedures; VA Directive 7700, Occupational Safety and Health; VHA Directive 2011-036, Safety and Health During Construction Activities.

6. **RESPONSIBILITY**: The Industrial Hygiene/Safety Manager is responsible for the contents of this VAMC Memorandum.

7. **RESCISSION(S):** MCM 001-001S-10-688 dated 12-1-2010.

8. **REISSUE DATE**: This Medical Center Memorandum will be reviewed and reissued with necessary updates on or before October 2016. This policy remains in effect until rescinded or superseded.

FRANK KEHUS
Interim Medical Center Director

Attachments (3)

ATTACHMENT A

MEDICAL CENTER MEMORANDUM
SEARCH TABLE

Title	Construction Safety
Service	Associate Director
Program	Safety
MCM Number (Last 3)	688
Responsible Position	Safety and Health Manager
JC Chapter	Environment of Care
JC Standard(s) optional	
Effective Date	October 8, 2013
Reissue Date	October 2016

ATTACHMENT B

Weekly Construction Area Inspection Form

Weekly Construction Area Inspection Form

Date: _____ Contract Number or Description: _____

Area or Building Name: _____

Inspectors: _____

Please survey the work area and explain in Section B any deficiencies found.

Section A - Means of Egress	YES	NO	N/A
1. Fire/smoke doors unlocked, free of obstructions?			
2. Means of egress free of obstruction and clearly marked?			
3. All Exits?			

Section B - Fire Alarm, Fire Detection and Fire Suppression Systems	YES	NO	N/A
1. Fire alarm pull stations unobstructed? (If still in service)			
2. Smoke detector dust caps in use (if still in service)?			
3. Contractor employee assigned to ensure caps are removed at close of day?			
4. Hot Work Permits in use?			
5. Sprinkler heads unobstructed?			
6. Heat detectors installed and in service?			

Section C - Housekeeping and Traffic Control	YES	NO	N/A
1. Trash and debris removed promptly?			
2. Debris covered/dampened prior to being transported outside the construction area?			
3. Floor mats and dust tack mats located at the entrance to the construction area and replaced as needed?			

Section C - Housekeeping and Traffic Control	YES	NO	N/A
4. Tool & material storage neat and orderly (18 inches below sprinkler heads)?			
5. Signs installed to restrict patient access (doors locked as needed)?			
6. Dry sweeping is not performed?			
7. Doors closed, sheetrock or fire resistant plastic sheeting installed to enclose wall openings?			
8. Barriers wiped down prior to being removed?			

Section D - Air Handling and HVAC	YES	NO	N/A
1. Negative pressure, with respect to the patient occupied space, is maintained within the construction area?			
2. HVAC exhaust and supply ducts are covered during demolition?			
3. Construction debris chutes are not adjacent to open windows or HVAC air intakes?			
4. Other (list).			

Section E - Hazardous Chemicals/Conditions	YES	NO	N/A
1. Appropriate storage?			
2. MSDS posted on job site?			
3. Lockout/Tagout procedures in place?			
4. Permit-required confined space procedures in place?			
5. Hazardous building materials, such as asbestos, have been identified and addressed?			
6. Other (list).			

Section F - Clothing	YES	NO	N/A

1. Contractor clothing are relatively dust free when performing work in a patient occupied space?			
2. Contractors with dusty clothing are provided gowns and foot coverings when exiting through critical patient care areas?			
3. Other (list).			

Please explain nature of any non-compliance issues.

Section G - Non-Compliance Issues		
Item #	Deficiency	Corrective Actions

Content of the above checklist is advisory and should be modified to satisfy the circumstances of the specific contract or work activity. Any modification of the checklist requires the consent of the safety and engineering staff.

Comments:_____

ATTACHMENT C

Site Pre-Construction Risk Assessment	
Location of Construction	Project Start Date:
Project Name	Project Number:
Project Coordinator:	Estimated Duration:
Description of project:	

Yes	No	NOISE
		Will there be noise generated that will impact a department adjacent to, above, or below the construction area?
		a. If so, these departments must be notified.
		b. How are you going to reduce the noise to an acceptable level?

Yes	No	VIBRATION
		Will there be vibration generated that will impact a department adjacent to, above, or below the construction area?
		a. If so, these departments must be notified each time this type of work will be performed.
		b. How are you going to reduce the vibration to an acceptable level?

Yes	No	ENVIRONMENTAL
		Are any of the following environmental hazards present?
		Will hazardous chemicals be used on this project? How will fumes and odors be controlled? *Material Safety Data Sheets (MSDS) are required.*
		Is asbestos abatement required on this job? *If so, notify Safety*
		Will there be hot work (welding, brazing, soldering) done on this project? If so, then a Hot Work Permit must be posted on the job site. All hot work must have a fire watch assigned to each area while the hot work is being performed.
		Will there be work performed above the ceiling? Will repair/construction activities involve penetration in to existing walls, ceilings, door frames, or doors?
		Will confined space entry be required on this project? If so, the Confined Space Entry Procedures must be followed.

Yes	No	UTILITY OUTAGES
		Will any of the following systems be out of service at any time during the project?
		Electrical
		Domestic water
		Oxygen
		Sewage
		HVAC
		Steam
		Medical Gas (indicate : Oxygen, Medical Air, Vacuum)

AIR QUALITY RISK ASSESSMENT
(Mold, Temperature, Humidity, Dust etc.)

Construction activity types are defined by the amount of dust that is generated, the duration of the activity, and the amount of shared HVAC systems. Contact Hospital's Safety and Infection Control Departments if any activity is questionable under these guidelines.

Yes	No	Mold
		a. **Air Sample.** Sampling of the inside and outside air
		b. **Surface Sample**. Sampling the amount of mold spores deposited on indoor surface (swap, tape, and dust samples)
		c. **Bulk Samples**. The removal of materials from the contaminated areas to identify and determine the concentration of mold in the sample.
		TEMPERATURE
		a. **Check A/C system**. Difference in temperature that allow/cause condensation to occur .
		b. Keep indoor air temperature higher than 74 degrees will inhibit on mold growth.
		HUMIDITY
		a. Check the amount of humidity in the indoor environment (when humidity reaches high levels moisture is trapped).
		DUST
		a. Will dust be generated during this project? ***If yes, initiate an Infection Control Risk Assessment(ICRA) to determine if an ICRA Permit is required***
		Dust caution sign posted?
		Construction Barrier in placed?
		Barriers sealed-no penetrations