

**18.0 ATTACHMENTS:** (page 1 of 40)

- A - Contractor Safety Manual of the Providence VAMC, dated January 2009 (page 2 of 40)
- B – Construction Specifications for Infection Control (page 12 of 40)
- C – Infection Control Construction Permit (page 21 of 40)
- D – Not Used (Not Included)
- E – Interim Life Safety Procedures (page 22 of 40)
- F - Fire Systems Protection during Construction (page 28 of 40)
- G – Registration of Privately Owned Vehicles (page 30 of 40)
- H – Cranes (page 33 of 40)
- I – Site Plan (**See – separately attached**) (page 1 of 1)

ATTACHMENT A

**Providence VA Medical Center  
Construction Safety Manual**

<b>INTRODUCTION .....</b>	<b>3</b>
<b>1.0 GENERAL INFORMATION .....</b>	<b>4</b>
1.1 Standard Safety and Security Rules .....	4
1.2 Safety Permits and Procedures .....	4
1.3 Housekeeping.....	5
1.4 Accident, Incident, Injury, or Illness.....	5
<b>2.0 ENVIRONMENTAL ISSUES .....</b>	<b>5</b>
2.1 Hazardous Waste Management .....	5
2.2 Transport of Hazardous Materials .....	5
2.3 Spill Prevention and Control .....	6
2.4 Pest Control .....	6
2.5 Air Emissions .....	6
2.6 Stormwater and Wastewater .....	7
2.7 Biological/Chemical/Radioactivity Hazards .....	7
2.8 Asbestos Containing Materials.....	7
2.9 Lead Paint.....	8
<b>3.0 OSHA SAFETY ISSUES.....</b>	<b>8</b>
3.1 Hazardous Materials and Hazard Communication .....	8
Hazardous Materials.....	8
3.2 Confined Space Entry .....	9
3.3 Lockout / Tagout.....	9
3.4 General Electrical Safety .....	9
3.5 Compressed Gas Cylinders.....	10
3.6 Powder-Actuated Tools .....	10
3.7 Welding, Cutting, and Brazing Hot Work Permit.....	10
3.8 Cranes and Rigging .....	11
3.9 Miscellaneous Additional Safety Rules for the Protection of PVAMC .....	11
Patients, Visitors, Employees, Neighbors and Property .....	11

## **INTRODUCTION**

All contractors, Project Managers, and employees engaged in construction activities at the PVAMC must be aware of the construction safety requirements outlined in this manual.

The implementation of construction safety programs will minimize the potential for injuries and illnesses to our patients, employees and visitors from unsafe construction activities conducted by contractors and VA employees, including operations and maintenance crews, permanent construction crews and temporary purchase and hire staff.

It is the policy of the VHA to protect patients, staff, visitors and contractors from safety and health hazards associated with construction activity on VA/VHA property and leased property at which VA-funded construction is occurring.

Construction activities are defined as those that include VHA projects performed by employees or contractors and enhanced use lease projects within structures fully managed by VHA or within the purview of VHA authority.

Safety is a philosophy and a practice that identifies and eliminates job site hazards throughout the lifecycle of a project and discourages work practices and equipment that place individuals at risk of injury.

This manual outlines programs and procedures to maintain a healthy environment of care for our patients and a safe and healthy worksite for employees, visitors and contractors during construction activities.

## 1.0 GENERAL INFORMATION

### 1.1 Standard Safety and Security Rules

The following are some reasons for which an employee of a contractor may be temporarily or permanently removed from Medical Center premises:

- Possession or use of alcoholic beverages or regulated drugs not prescribed by a physician
- Possession of explosives, firearms, ammunition, and other weapons
- Deliberate violation of safety or security rules
- Illegal dumping, handling, or disposal of hazardous materials
- Destruction or removal, without written permission, of any property belonging to Providence VAMC, the property owner, employee, or other contractors or employees
- Failure to follow the directions or instructions of a VA Police Officer, VA Project Manager or VA Project Manager
- Failure to wear in a visible manner a facility issued identification badge
- Intimidating, threatening, harassing, impeding or interfering with an inspector, security officer, or Providence VAMC employee or designated representative
- Using emergency exits other than for emergencies
- Misuse of fire prevention and protection equipment
- Unauthorized removal or destruction of a safety barricade, handrail, guardrail, warning sign, fall protection, or other warning devices intended to protect PVAMC's students, faculty, employees, neighbors or property.

For additional information on safety guidelines that are related to security issues, you may refer to the Providence VAMC Police Department

### 1.2 Safety Permits and Procedures

The following operations may present a hazard to PVAMC employees, visitors, patients, neighbors or property. Therefore, you must obtain written approval through the Providence VAMC Project Manager before:

- Working on fire protection/detection systems
- Penetrating any smoke/fire barrier wall
- Performing burning, welding, cutting, soldering, or other hot work
- Performing any work above an existing finished ceiling
- Obstructing an exit door or any exit path within any building
- Obstructing access to the hospital by emergency services
- Working on electrical, steam, chilled water systems or other energized systems
- Moving emergency equipment (fire extinguishers, first aid kits, etc.) provided by PVAMC
- Installing a temporary electrical service
- Working with hazardous chemicals (including solvents and paints)
- Generating hazardous wastes (including waste oil)
- Using powder actuated tools
- Using a gas, diesel, or LP (propane) powered engine indoors
- Operating a power vehicle or self-propelled work platform
- Excavation/trenching
- Using radioactive sources or conducting field radiography (x-ray)
- Working with asbestos-containing materials
- Working on security systems
- Working with compressed air/gases
- Using a laser
- Working on a fume or biological hood
- Working on a solvent storage cabinet
- Working on heating, ventilation, or air conditioning equipment
- Working on a roof
- Lifting or hoisting with cranes, derricks, hoists or helicopter
- Performing blasting operations

#### **Special Rules for Operations Involving Utilities:**

- Only Providence VAMC Facilities Operations may shut down or start up operating utilities.
- You must notify your Project Manager, who will coordinate with Providence VAMC Facilities Operations, *in advance* of the need for such shutdowns or startups.

**Special Rules for Lockout/Tagout of Machinery, Pipes, etc.:**

- If you intend to service or maintain machinery that could hurt someone if it were to unexpectedly start up, you must inform the Providence VAMC Project Manager of the Lockout/Tagout procedures you intend to follow.
- See Section 3.3 on Lockout/Tagout generally.

### 1.3 Housekeeping

You must maintain good housekeeping. You must keep work areas neat, clean, orderly and free of excess trash and debris and never block walkways, stairs, exits, or create a tripping hazard. Cover and/or place guardrails around open holes, trenches, or excavations into which PVAMC's visitors, patients, or employees may fall. Poor housekeeping at a job site may lead to an increased potential for safety hazards and an increased incidence of accidents and chemical spills.

### 1.4 Accident, Incident, Injury, or Illness

After notifying the appropriate emergency agency (e.g., 9-1-1), work related accidents, incidents, injuries, and illnesses must be immediately reported to the Providence VAMC Project Manager or representative. The Contractor is responsible for notifying OSHA for any incidents that are reportable to that agency.

## 2.0 ENVIRONMENTAL ISSUES

### 2.1 Hazardous Waste Management

Hazardous waste generated by a Contractor as part of its work must be properly identified, stored and disposed of in accordance with all applicable local, state and federal laws. The Contractor must coordinate with its Providence VAMC representative to provide a list of hazardous waste(s) to be generated during the project, and to determine the location(s) available for hazardous waste storage. The Contractor must also ensure, at a minimum, proper labeling, adequate secondary containment, segregation of incompatible materials and routine inspection of storage areas as required by law. In addition, all hazardous waste containers shall be constructed of a material that is compatible with the waste, shall be in sound condition, and shall be kept securely closed at all times in accordance with applicable regulations. Containers and/or tanks used to store hazardous wastes must be managed in accordance with applicable regulations and must be inspected daily.

The Contractor is responsible for completing all disposal documents, which may include, but are not limited to, waste profiles, waste analytical samples and hazardous waste manifests. Providence VAMC shall be designated as the Generator on all documents and shall be provided with copies of all waste analyses, land disposal restriction forms and related documentation. Copies of all disposal documents shall be submitted to the Project Manager for review at least 5 days prior to shipment. The Project Manager or an EH&S representative will sign the manifests as the Generator. At the time of shipment, the Contractor shall provide the bottom three copies of the manifest to the Project Manager or the PVAMC EH&S representative for distribution to the appropriate agencies.

Contractor employees must be appropriately trained in hazardous waste procedures. In the event a Contractor encounters previously unidentified material that is reasonably believed to be radioactive, volatile, corrosive, flammable, explosive, biomedical, infectious, toxic, hazardous, asbestos containing or oil-based, the Contractor shall immediately stop work in the affected area and report the condition to the Project Manager. At no time shall such material be disposed of in chutes, dumpsters, drains, pipes or any other waste container. The Contractor agrees to cooperate with the Project Manager and any consultants engaged by the Project Manager to perform services with respect to the analysis, detection, removal, containment, treatment and disposal of such regulated materials.

### 2.1 Transport of Hazardous Materials

All transportation of hazardous materials while on Providence VAMC property shall be conducted in accordance with USDOT Hazardous Materials Regulations for proper packaging, marking/labeling, handling, documentation, etc. At no time should hazardous materials be transported via public or private roads at Providence VAMC in a manner that could result in an unsafe condition for personnel or the environment.

## 2.2 Spill Prevention and Control

Providence VAMC's Spill Prevention Control and Countermeasures (SPCC) Program establishes Medical Center-wide procedures for the prevention and detection of spills and/or releases of oil or hazardous materials, including the following:

- Based on the inventory of oil and hazardous chemicals that will be brought on-site, the Contractor shall have available equipment (e.g., secondary containment pallets, absorbent pads, absorbent booms, speedi-dry) that is suitable and sufficient to control a potential spill/release.
- The Contractor is responsible for identifying conveyances to the environment (e.g., sumps, storm/floor drains, etc.) and adequately minimizing spill potential to these areas.
- The Contractor is responsible for the proper storage of all flammable and combustible chemicals that are brought and/or stored on site to complete the work of this contract. Such storage may require the use of safety containers, safety cabinets, and/or secondary containment. The Contractor shall also ensure that any incompatible chemicals are safely segregated. The Contractor is responsible for maintaining and securing all chemical containers and all chemical storage areas. This requires selecting locations and methods to minimize exposure to rainfall, surface water, and the ground surface or subsurface. Enclosures, shelters, and secondary containment should be used where appropriate.
- The Contractor must use appropriate protective procedures such as double containment, employee training, overflow protection, and other measures as part of activities involving the use, storage, or handling of petroleum products or hazardous materials on Providence VAMC Property.
- The Contractor must ensure that his/her employees are adequately trained in spill procedures outlined below. The Medical Center's SPCC Program also establishes reporting requirements in the event of a spill or release of oil or hazardous materials. In the event of a release or spill, the Contractor must follow all of the reporting requirements of the SPCC Program as specified below:

(1) The Contractor shall extinguish all sources of ignition and isolate incompatibles or reactive chemical substances.

(2) The Contractor shall determine if the spill/release is incidental or non-incidental.

### (3) For incidental spills/releases:

- ◆ The Contractor shall attempt to stop or contain the spill/release at the source provided that doing so does not endanger anyone.
- ◆ The Contractor shall prevent discharge of materials to environmental receptors including drains, sumps, soil, etc.
- ◆ The Contractor shall immediately notify the Project Manager of all incidental spills/releases.
- ◆ The Contractor is responsible for the proper collection, storage and disposal of waste materials in compliance with EPA and R.I. DEM regulations and in cooperation with the Project Manager.

(4) For non-incidental spills/release:

- ◆ The Contractor shall immediately report the spill/release to the Medical Center's Environmental Health & Safety (EH&S) Department who will advise you on the need for initiating contact with spill response vendors.
- ◆ The Contractor shall follow the steps for incidental spill/releases identified in item (3) above, provided that it is safe to do so.
- ◆ PVAMC's EH&S Department will coordinate ALL reporting to outside agencies and will conduct follow-up written notifications if necessary.
- ◆ The Contractor will conduct an incident analysis and coordinate with the Project Manager and the PVAMC EH&S Department on any actions that are required to prevent recurrence.
- ◆ If it is deemed necessary to engage a professional spill cleanup company, the PVAMC EH&S Department will coordinate the cleanup through the Project Manager.

## 2.3 Pest Control

If a Contractor or his/her employees see evidence of cockroaches, mice, ants or other pests during the course of their work, they must notify the Project Manager immediately. The Contractor shall not use any insecticide products on Medical Center property unless such activities are part of your contracted work and you are specifically trained to do so.

## 2.4 Air Emissions

### *Combustion Units*

*[Combustion units include, but are not limited to, boilers, heaters, emergency generators and kilns.]*

1 "Incidental" spills meet **ALL** of the following criteria: 1) personnel are familiar with the hazards associated with the spilled material; 2) containment/response does not pose potential health and safety hazards (e.g. fire, explosion or chemical exposure); 3) a small quantity (less than 10 gallons) of material is spilled/release which **DOES NOT** reach the environment or pose potential

health and hazardous; and 4) spilled/release material can be readily absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate area or by maintenance personnel.

“**Non-incidenta**l” spills include 1) major spills/release (e.g. greater than 10 gallons) that do not reach the environment or 2) any amount of spilled material that escapes to the environment (including drains, sumps, soil, etc.).

All Contractors must immediately report the following to the Project Manager:

- Any maintenance or repairs to a combustion unit that could result in a change in maximum heat input value or overall emissions (e.g. burner replacement or fuel conversions)
- Any conditions discovered which could have resulted in an increase on air pollutant emissions.

*CFC Containing Units [CFC containing units include those containing any ozone depleting refrigerants including, but not limited to, Chlorofluorocarbons (CFC) and Hydrochlorofluorocarbons (HCFC).]*

Contractors shall immediately notify the Project Manager whenever they become aware of any unintentional or intentional release of CFCs above de-minimis levels as established by EPA regulators.

Contractors shall provide the following documentation to the Project Manager:

- EPA certifications for any reclaimers to which CFC products evacuated from Providence VAMC systems are to be sent.
- Certifications for any CFC recycle/recovery equipment to be used at PVAMC
- Technician Certifications
- Service records for all units containing greater than 50 pounds of refrigerant. Records must include the date and type of service and the type and quantity of refrigerant added.

Contractors shall immediately notify and provide documentation to the Project Manager whenever:

- A leak rate equals or exceeds 35% per year for commercial/industrial processes
- A leak rate equals or exceeds 15% per year for comfort cooling processes
- A release occurs of >100 pounds in a 24 hour period for CFC-12, CFC-113 and R-500. *Halon* Service providers shall immediately notify the Project Manager whenever it becomes aware of any unintentional or intentional release of halon.

## **2.5 Stormwater and Wastewater**

### **Stormwater**

Projects that disrupt over one (1) acre of land must adhere to the EPA’s Phase II stormwater requirements.

These projects are required to obtain a NPDES permit and implement best management practices. The Contractor is responsible for obtaining such permits before the start of work.

### **Wastewater**

Providence VAMC’s wastewater discharge is regulated by Narragansett Bay Commission (NBC). The discharge of any wastewater must adhere to these permit requirements. These include but are not limited to:

- No discharge of mercury, silver or other metal-bearing wastewater
- No discharge of highly corrosive substances ( $5 < \text{pH} < 10.5$ )
- No discharge of flammable materials that could create a hazard for Providence VAMC personnel these are the only references that will be noted in the policy. or NBC treatment works personnel.

1.0 The Contractor must identify all wastewater streams for the Project Manager and obtain approval for drain discharge.

## **2.6 Biological/Chemical/Radioactivity Hazards**

Some Providence VAMC operations involve the use of biological, chemical, or radioactive material that can be hazardous to PVAMC’s visitors, patients, or employees if not handled safely. Areas where work with biological, chemical, or radioactive materials is being performed will be marked with appropriate signs.

Do not enter these areas and do not handle hazardous biological, chemical, or radioactive material unless it is part of your contracted work and you are specifically trained to do so.

## **2.7 Asbestos Containing Materials**

Providence VAMC will have determined, before work is begun, the presence, location, and quantity of asbestos-containing or potentially asbestos-containing materials that would be specifically impacted by the work of your contract. The Providence VAMC Project Manager will provide a specific asbestos audit report for those work areas in question. The contractor shall not disturb asbestos-containing materials unless such activities are part of your contracted work and you are specifically trained to do so. Asbestos abatement contractors should coordinate with the Project Manager and the Medical Center’s EH&S Department for specific requirements for asbestos abatement work.

The Contractor shall not disturb, damage or otherwise handle any *suspect* asbestos containing material. It is recommended that the following suspect materials be assumed to contain asbestos:

Cement Pipes, High Temperature Gaskets, Electrical Wiring Insulation  
Cement Wallboard, Lab Hoods/Benches/Gloves, Chalkboards

Cement Wallboard, Fire Blankets/Curtains/Doors, Roofing Shingles and Felt  
Flooring, Backing, Elevator Equipment Panels, Base Flashing  
Construction Mastics, Elevator Brake Shoes, Thermal Paper Products  
Acoustical Plaster, HVAC Duct Insulation, Caulking/Putties  
Decorative Plaster, Boiler Insulation Adhesives  
Textured Paints/Coatings, Breaching, Insulation, Wallboard  
Ceiling Tiles and Lay-in Panels, Pipe Insulation, Joint Compound  
Spray-applied Insulation, Cooling Towers, Vinyl Wall Coverings  
Blown-in Insulation, Electrical Cloth, Asphalt Floor Tile  
Fireproofing Materials, Heating and Electrical Ducts, Vinyl Sheet Flooring  
Taping Compounds, Electrical Panel Partitions, Vinyl Floor Tile  
Packing Materials (wall/floor penetrations), Ductwork, Flexible Fabric, Connectors, Spackling Compounds  
The Contractor shall not sweep, dust, vacuum or mop dust or debris that is the product of a suspect asbestos containing material. The Contractor shall also not pick up or throw away any suspect asbestos-containing waste or trash. If it material that is suspected to be asbestos-containing is disturbed and becomes airborne, the Contractor shall immediately notify the Project Manager.  
If it is part of the Contractor's work, stripping of floor finishes shall be done using low abrasion pads at speeds lower than 300 rpm and wet methods shall be used. The Contractor shall take care not to overstrip floors and shall stop stripping immediately upon removal of the old surface coat. Sanding of flooring material is strictly prohibited unless it is part of your contracted work and you are specifically trained to do so.  
Any suspect asbestos containing material that is observed by the Contractor to be crushed, ripped, broken or in any way damaged should be reported to the Project Manager immediately.  
Contractors must, within 24 hours, convey to the Providence VAMC Project Manager any information they newly discover concerning the presence, location and quantity of asbestos-containing or potentially asbestos-containing materials.

## **2.8 Lead Paint**

Unless the Providence VAMC Project Manager provides a specific lead-paint inspection, Contractor's should assume that any painted surface they come in contact with is coated with lead-based paint. Therefore, Contractor's should not perform any intrusive, dust-generating work on painted surfaces (e.g. drilling, cutting, brazing, scraping, demolition), unless the surface has confirmed to be non-lead or unless such work is part of your contracted work and you are specifically trained to do so.  
Any painted surfaces that have loose, flaking, and chipping or otherwise non-intact paint should not be impacted by the Contractor and should be reported to the Project Manager immediately.  
Lead paint abatement contractors should coordinate with the Project Manager and the Medical Center's EH&S Department for specific requirements for lead abatement work. Refer to the section of this manual on Hazardous Waste for guidelines on the proper disposal of lead containing paint.

## **3.0 OSHA SAFETY ISSUES**

### **3.1 Hazardous Materials and Hazard Communication Hazardous Materials**

- Do not handle or use hazardous materials without training by your company's representative.
- No solvents, paints, or similar flammable, toxic, or irritating materials may be used in areas occupied by Providence VAMC employees, visitors, or patients unless specifically approved in writing by the Providence VAMC Project Manager.
- Maintain adequate ventilation when paints or solvents are used.
- Use flammable solvents and materials with extreme caution.
- Store flammable paints and solvents in approved flammable liquid storage cabinets if inside buildings.

#### **Hazard Communication**

The Contractor shall submit an inventory of all hazardous chemicals that are brought on-site with accompanying Material Safety Data Sheets to the Project Manager. The Contractor shall also ensure that all containers that are brought on site for the storage of hazardous chemicals (e.g., gas, paint, etc.) are labeled and inspected in accordance with all applicable regulations. The Contractor shall remove all hazardous chemicals that it brings on-site when work involving a specific hazardous chemical is complete.  
The Contractor may request and review Material Safety Data Sheets for any chemicals that are encountered on Medical Center property during the performance of its work.

## 3.2 Confined Space Entry

### Background

Providence VAMC has developed and implemented a Confined Space Entry Program to protect all Medical Center employees who are required to enter confined spaces. PVAMC's complete written program is available for review upon request to the Project Manager.

This Medical Center-wide program defines a "Confined Space" and an "Enclosed Space" in accordance with 29CFR §§ 1910.146 and 1910.269, respectively. Entrance into any of these spaces by a Contractor requires adherence with all applicable regulations as well as with certain Medical Center protocols as defined further below.

As part of the Confined Space Entry Program, the Medical Center performed hazard assessments, developed inventories and posted all confined and enclosed spaces at the point of entry. These postings include information on the classification of the space (e.g., "Permit Required", "Non-permit Required"), the confined space ID number, the location, the known hazards, and the minimum personal protective equipment needed for entry. Where available the Medical Center's experience with the confined space is also included on the signage. The Medical Center Confined Space Inventory and hazard assessment forms are available for review.

### Requirements

- The Contractor is responsible for developing, implementing and maintaining his/her own Confined Space Entry Program, including provisions for emergency rescue in accordance with OSHA regulations as it applies to the work of this contract.
- If during the course of its work, the Contractor encounters a confined space that has not been previously identified by the Medical Center, it must immediately bring the space to the attention of the Project Manager and delay entry until Providence VAMC has examined the space.
- When both Medical Center personnel and Contractor personnel are working in or near confined spaces, the Contractor shall coordinate all operation with the affected Medical Center personnel before entry.
- Advance notification is always required. Whether you enter a confined space with a PVAMC employee or not, the Contractor's entry attendant must always first *inform* the Providence VAMC Project Coordinator *before* you enter a confined space.

The Contractor shall provide the Project Coordinator with:

- The exact location of the confined space and confined space ID number;
  - The time of entry and approximate entry duration; and
  - The names of authorized attendants and entrants.
- *After the entry:* If you have entered a "permit-required" confined space, you must, after the entry is concluded, notify Providence VAMC Project Coordinator of (1) the permit space program you followed and (2) any hazards you confronted or created in the space.

## 3.3 Lockout / Tagout

Providence VAMC protects its patients, visitors, employees, neighbors and property in part by complying with 29 CFR 1910.147 – Control of Hazardous Energy Sources (Lockout/Tagout). As part of PVAMC's Lockout/Tagout Program, standard locks and tags are used to control the start-up of equipment that is being serviced or maintained by its employees. At no time shall the Contractor or its employees override any locks or tags that they encounter during the performance of its work.

The Contractor is responsible for developing; implementing and maintaining his/her own Lockout/Tagout Program in accordance with OSHA regulations as it applies to the work of this contract. The Contractor shall submit a copy of its Lockout/Tagout Program to the Project Manager or Property Manager before the start of any work where 29 CFR 1910.147 is applicable. The only purpose of this submission is to ensure that, for the safety of PVAMC's students, faculty, employees, neighbors or property, the Contractor's Lockout/Tagout procedures are consistent with restrictions and prohibitions of PVAMC's Lockout/Tagout program.

- Providence VAMC Engineering and Utilities will shut down and start up utility systems.
- The Contractor will maintain a log of all machines and equipment that are locked out and/or tagged out during the performance of the work of this contract. This log shall identify the equipment that was worked on, the date that work was performed, and the name of the individual performing the work.

The Contractor will submit this log to the Project Manager on a monthly basis when Lockout/Tagout work is being performed.

## 3.4 General Electrical Safety

- Only qualified electricians are permitted to work on electrical systems and equipment that uses or controls electrical power.

- Do not operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapors, or liquids are present, unless specifically approved for the location.
- Should a circuit breaker or other protective device "trip," ensure that a qualified electrician checks the circuit and equipment and corrects problems before resetting the breaker.
- Erect barriers and post warning signs to ensure non-authorized personnel stay clear of the work area.
- Report hazards (lack of protective guards or covers, damaged equipment, etc.) to the PVAMC Medical Center Project Manager immediately.
- Do not leave electrical boxes, switch gear, cabinets, or electrical rooms open when not directly attended. Insulate energized parts when covers have been removed or doors are ajar. Use of cardboard, plywood, or other flammable materials to cover energized circuits is prohibited.

### **3.5 Compressed Gas Cylinders**

Compressed gases can pose a severe hazard to PVAMC's patients, visitors, employees, neighbors and property. Therefore, the following measures must be taken for their protection:

- Valve protection caps must be in place when compressed gas cylinders are transported, moved, or stored.
- Close cylinder valves and replace valve covers when work is complete and when cylinders are empty or moved.
- Secure compressed gas cylinders in an upright position in a welding cart or to a solid object (using chains, straps, or a rigid retaining bar). Secure compressed gas cylinders on an approved carrier while being transported.
- Keep cylinders at a safe distance or shielded from welding or cutting operations. Do not place cylinders where they can contact an electrical circuit.
- Keep oxygen and flammable gas regulators in proper working order and a wrench in position on the acetylene valve when in use. If not manifolded together, separate oxygen and flammable gas cylinders by 20 feet or a 5 foot high fireproof barrier.
- If a leak develops in a cylinder and it cannot be immediately corrected, move the cylinder to a safe location outside the building.
- Use only approved spark igniters to light torches.
- Cylinders must not be taken into or stored in confined spaces, including gang boxes and office/storage trailers.
- Do not store hoses and regulators in unventilated or closed containers or areas.
- Do not leave behind partially filled or empty cylinders. Always remove them from the site.

### **3.6 Powder-Actuated Tools**

Powder-actuated tools can pose hazards to PVAMC's patients, visitors, employees, neighbors and property. Such tools are, therefore, not permitted in occupied Providence VAMC buildings without the approval of the PVAMC Medical Center Project Manager. In addition:

- Contractor's who operate powder-actuated tools must be properly trained in their use and carry a valid operator's card provided by the equipment manufacturer.
- Each powder-actuated tool must be stored in its own locked container when not being used.
- A sign at least 7 inches by 10 inches with bold face type reading "POWDER-ACTUATED TOOL IN USE" must be conspicuously posted when the tool is being used.
- Powder-actuated tools must be left unloaded until they are actually ready to be used.
- Powder-actuated tools must be inspected for obstructions or defects each day before use.
- All Powder-actuated tool operators must have and use appropriate personal protective equipment such as hard hats, safety goggles, safety shoes and ear protectors.

### **3.7 Welding, Cutting, and Brazing Hot Work Permit**

- Obtain a permit from the Project Manager for each separate work activity and ensure that all conditions of the permit are met at all times. The permit must be obtained from the Contract Coordinator prior to the start of any welding/cutting/brazing work. In addition, the Contractor must also maintain its own hot work permit system in accordance with OSHA regulations.
- Remove combustible materials from the area before beginning work.
- Elevate oxygen/acetylene hoses seven feet above the work area or otherwise protect them from damage.
- Install anti-flash back (safety/check) valves in both the oxygen/acetylene hoses at the regulator.
- Shield adjacent areas with welding partitions.

- Have a second person stand by with an approved fire extinguisher for welding and burning operations in accordance with OSHA regulations and permit requirements. This person should remain in the area for a minimum of 30 minutes after the hot work is completed to ensure the site is cold.

### **3.8 Cranes and Rigging**

Each crane, rigging, or hoist brought onto Providence VAMC property must have an annual inspection performed by a certified testing agency. Before operations begin on site, documentation, including a log book, must be provided to Providence VAMC Project Manager or its designee.

The operator is responsible for the proper placement of the crane in relationship to the load to be handled and the landing area so as to obtain the best rated lift capacity, and the installation and maintenance of crane swing radius protection.

All operators must possess a valid R.I. hoisting license. Documentation of this license shall be provided to the Providence VAMC Project Manager. At no time shall loads be hoisted by a non licensed operator.

### **3.9 Miscellaneous Additional Safety Rules for the Protection of PVAMC Patients, Visitors, Employees, Neighbors and Property**

- Do not perform work over the heads of people or leave tools or equipment overhead.
- Isolate your work area with safety markers, tape barriers, blinker lights, etc.
- Report unsafe acts or conditions to your supervisor.

## ATTACHMENT B

### INFECTION CONTROL

#### **PART 1 GENERAL**

##### **1.1 DEFINITIONS**

Construction Type A - Inspection and Non-Invasive Activities. Includes, but is not limited to: removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet; painting (but not sanding); wall covering; 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.

Construction Type B - Small scale, short duration activities that create minimal dust. Includes, but is not limited to: installation of telephone or computer cabling; access to pipe chase spaces; cutting of walls or ceilings where dust migration can be controlled.

Construction Type C - Any work, which 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: sanding of walls for painting or wall covering; removal of floor coverings, ceiling tiles and casework; new wall construction; minor ductwork or electrical work above ceilings; major cabling activities; and any activity which cannot be completed within a single work shift.

Construction Type D - Major demolition and construction projects. Includes, but is not limited to: activities that require consecutive work shifts; require heavy demolition or removal of a complete ceiling system; and new construction.

Group 1 Lowest Risk Patient Risk Group - Office areas

Group 2 Medium Risk Patient Risk Group - Cardiology, Echocardiography, Laboratories, Nuclear Medicine, Physical Therapy, Radiology/MRI, Respiratory Therapy

Group 3 Medium-High Risk Patient Risk Group - Emergency Room, Day Surgery, Pharmacy, Endoscopy

Group 4 Highest Risk Patient Risk Group - 4B (Hem/Onc Unit), Operating Rooms/Sterile Processing, Cardiac Catheterization & Angiography Areas, Dialysis, ICU/CCU/CVT/CVT-I, Med/Surg Nursing Units, Post-Anesthesia Care Units.

HEPA - High Efficiency Particulate Air

Level of Infection Control - Class I, II, III or IV, as determined from the IC Matrix

##### **1.2 DESCRIPTION**

The purpose of the infection control procedures are to minimize the risk of infection during construction by maintaining the integrity of the environment, and controlling the spread of dust.

The following Infection Control Matrix defines the matrix of precautions to be implemented for construction, demolition and renovation. Matching the planned construction type with the patient risk group on the matrix defines the minimum level of infection control required (Class I, II, III or IV).

<u>Risk Level</u>	<u>Construction Activity</u>			
	<u>Type A</u>	<u>Type B</u>	<u>Type C</u>	<u>Type D</u>
Group 1 Lowest Risk	Class I	Class II	Class II	Class III/IV
Group 2 Medium Risk	Class I	Class II	Class III	Class IV
Group 3 High Risk	Class II	Class II	Class III/IV	Class IV
Group 4 Highest Risk	Class II	Class III/IV	Class III/IV	Class IV

Class I:

1. Execute work by methods to minimize raising dust and fumes from interior and exterior construction operations.
2. Water mist work surfaces to control dust
3. Provide active means to prevent airborne dust from dispersing into the atmosphere.
4. Immediately replace a ceiling tile displaced for visual inspection
5. Use travel routes that minimize exposure of patients to construction workers, materials, tools, and equipment.
6. Schedule utility interruptions during periods of low hospital activity.

Class II: In addition to precautions for Class I:

1. Provide active means to prevent airborne dust from dispersing into the atmosphere.
2. HEPA vacuum upper surfaces of ceiling tiles prior to removal
3. Seal unused doors with duct tape
4. Block off and seal air vents
5. Place adhesive walk-off mats at entrances and exits of work areas.
6. Seal or isolate HVAC system in areas where work is being performed.
7. HEPA vacuum work surfaces and containers before removing from the work area.
8. HEPA vacuum worker clothing, tools, materials and equipment before leaving the work area.

Class III: In addition to the precautions for Class I and II:

1. Install critical barriers at all openings to the work area
2. Isolate HVAC system in area where work is being done to prevent contamination of the duct system.
3. Maintain negative air pressure within the work site utilizing HEPA-equipped air filtration units.
4. Seal holes, pipes, conduits and punctures within the work area using fire-safe, impermeable materials.
5. Construct anteroom contiguous to the work area and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving the work site.
6. Contain construction waste before transport in tightly covered containers
7. Cover transport receptacles or carts. Tape covering to container to seal all joints.
8. Do not remove barriers from the work area until the completed project is thoroughly cleaned by the VA's Environmental Services Department and inspected by the VA.

Class IV: In addition to precautions for Class I, II and III:

1. No work is permitted in areas occupied by patients.
2. All personnel entering the work site are required to wear head covers, shoe covers, and overalls. Head covers, shoe covers, and overalls must be changed within the anteroom each time the worker exists the work area..

Conduct work by implementing the appropriate level of infection control as required or as noted herein.

### **1.3 SUBMITTALS**

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only.

SD-06 Test and Inspection Reports

Air sampling results  
Infection Control Compliance Checklists  
Logs of negative pressure measurements for work site;

SD-07 Certificates

Employee training;  
VAMC Infection Control Construction Permits; G

### **1.4 QUALITY ASSURANCE**

#### **1.4.1 Qualifications**

All personnel are required to wear N95 respirators, disposable booties and coveralls when working inside the containment. These are to be removed when exiting the work area.

All personnel are to be trained on infection control procedures and these work procedures.

### **1.5 EQUIPMENT**

Fire retardant polyethylene

HEPA filtered vacuum

HEPA filtered negative air machine

Duct tape

Framing and other materials necessary to isolate the work area

Power equipment that generates dust will have dust collection equipment attached.

## **1.6 PROJECT/SITE CONDITIONS**

### **1.6.1 Existing Conditions**

Perform work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, restore work to its original condition or better as determined by the Contracting Officer.

## **1.7 SEQUENCING AND SCHEDULING**

All work will be coordinated with the hospital infection control office, facility director, safety department, security office and work will not commence until the Infection Control Construction Permit has been approved by VAMC for that specific work area, including designation of the pre-determined debris removal routes.

Any issue that could have impact on VAMC operations must be reported to the VAMC project representative before commencement. This would include containment breeching, loss of negative pressure, releases of dust/debris into uncontrolled interior building areas or other issues that could affect infection control procedures.

Work phasing and breakout of specific work areas shall be in coordination with the Contracting Officers needs and the General Contractor's schedule and not adversely affect the operations of the VAMC in any way.

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

### **3.1 PREPARATION**

Obtain an Infection Control Construction Permit prior to performing any work of construction types A through D as defined above. Removal of a single ceiling tile in a suspended acoustic ceiling for observation purposes only does not require an infection control construction permit.

Existing air handling ductwork, supply and return grills, and/or HVAC fresh air intakes shall be isolated using air tight seals.

Elevator use must be coordinated with facilities and must not impact VAMC operations. Time and dates of waste load must be identified each day.

### **3.2 ERECTION**

Install impervious barriers from floor to ceiling and wall to wall to seal work areas from non-work areas. When work is in an area designated for Class IV protection, double impervious barriers shall be used.

Impervious barriers shall be constructed of non-combustible or fire retardant materials. Barriers shall be minimum one-hour rated construction. Fire retardant polyethylene may be used for impervious (dust) barriers that remain in place for not more than 72 hours. Construct all other

barriers of gypsum board (flame spread rating of 25 or less in accordance with ASTM E84) on both sides of metal steel studs. Extend the partitions through suspended ceilings to floor slab deck or roof. Wood framing is not allowed. At door openings, use Class C ¾ hour fire/smoke rated doors and frames with closers.

Critical barriers are to be installed on all doors and windows and other entrances to the work area.

Seal all holes, chases, pipe cavities and other perforations before commencing work. Sealants shall be non-flammable material.

Create a negative pressure work area by installing HEPA filtered negative air machines within the work area to remove dust particles from the air and exhaust to the outside.

Maintain negative pressure of at least -0.02 inches water in all work areas and document compliance.

Construct an entry/exit chamber for decontaminating people and equipment leaving the work area. A HEPA vacuum is required to remove dust from equipment and people leaving the site. Disposable PPE shall be removed prior to exiting the entry/exit chamber.

Adhesive Step-off pads at least 24"x36" are to be located at the exit of the work area before entering the occupied areas of the VAMC.

Vacuum the top surfaces of ceiling tiles using a HEPA vacuum prior to removal of ceiling tiles.

Traffic shall be minimized to/from the work area.

Elevators or stairwells within the work area must be isolated with impervious barriers.

Activities such as cutting, demolishing, and other large dust generating activities shall have work surfaces water-misted prior to impact.

Where powered equipment that generates dust will be utilized, such equipment shall have dust collection equipment attached.

Provide active means to prevent airborne dust from dispersing into the atmosphere.

### **3.3 FIELD QUALITY CONTROL**

#### **3.3.1 Inspection**

Conduct daily infection control inspections using the VAMC Infection Control Compliance Checklist. Daily inspections shall also be conducted on days when no construction activity is performed. Submit compliance checklist not more than 1 work day after completing an inspection.

Continuously monitor negative pressure levels. Document negative pressure levels at the start of work each day and at 4 hour intervals during each work day. Maintain a written log of negative pressure levels measured to include date and time of the measurement. Submit written log of negative pressure levels weekly and not more than 1 work day after completing the last log entry.

All barriers and HEPA filtered negative pressure are to remain in place until clearance has been obtained from VAMC representatives. This could include the IC Department, Safety Department, and Environmental Services Department.

### 3.3.2 Tests

VAMC representatives may conduct post abatement and during abatement sampling for dust, mold spores and surface contamination. Sampling may be conducted for dusts outside the work area to assess impact.

## 3.4 CLEANING AND DISPOSAL

The construction area and adjacent areas are to be kept in a clean and sanitary manner, using damp methods and HEPA filtered vacuuming.

Dry sweeping shall not be allowed.

Any dust tracked outside of the barriers must be removed immediately and as it accumulates.

Surfaces are to be cleaned daily or more frequently if needed with VAMC approved cleaning products.

There shall be no standing water in the work area. All accidental spills must be cleaned up immediately and wet porous material removed within one hour.

Any water damaged areas scheduled for impact/demolition shall be removed first, under HEPA filtered exhaust and containment, with the waste promptly bagged, to reduce aerosol of microbial agent/fungi/spore from potentially escaping out of the work space.

All barriers are to be removed carefully to minimize the spread of contaminants.

Where feasible, the optimal method for removal of debris is via an exterior type chute to closed top containers.

Where not feasible, waste is to be removed in clean air tight covered containers and transported from the work area by a pre-determined route during off-peak hours. Such designated debris removal routes shall be cleaned by damp-mop and/or HEPA filtered vacuuming prior to being returned to patient/staff use.

For work performed exterior to the building envelope, no debris/waste movement shall be allowed through the building interior spaces.

-- End of Section --

**VA MEDICAL CENTER  
Infection Control Program**

**INFECTION CONTROL FOR CONSTRUCTION WORKERS**

**WHY INFECTION CONTROL IS IMPORTANT**

Hospital-acquired infections (nosocomial) affect 5 percent of all patients admitted to hospitals in the United States and can cause significant illness or even death. Not all of these infections are preventable; however, studies show that up to 32 percent of hospital acquired infections can be prevented when hospitals employ an active and effective infections control program. Hospitals patients are at risk for infection because the stresses of illness and invasive treatments weaken their immune system. In general, healthy adults who are to be at work do not have the same risk for acquiring infections.

Our Infection Control Program is designed to identify and control situations that carry an increased risk for infection and to provide for a safe and healthful environment for patients and staff. During the construction project, you may be asked to do some things a bit differently to ensure that the environment is maintained as safe as possible for all. This information was developed through collaboration with the Infection Control Coordinator, Chief FMS, Safety Officer and Industrial Hygienist to help in explaining infection control aspects of construction in the hospital setting.

**DUST CONTROL POLICY**

- ◆ Determine if the HVAC system includes return air from the construction area. If so, divert to exhaust if possible, add filtering to remove dust before it enters the return air system, or blocking supply and return vents.
- ◆ Install impervious barriers from floor to floor slab above and wall to wall using framing, clips and duct tape as required to maintain and secure the barrier seal.
- ◆ Report disruptions such as holes in the barrier and interruptions in the seal to the Project Manager immediately.
- ◆ Place the “air moving and filtration device” into the containment area and operate to remove dust particles from the air.
- ◆ Negative air pressure will always be maintained in the construction site at all times during construction.
- ◆ If work is in an extremely sensitive area such as the Operating Room, double barriers may be required.
- ◆ Project site must be completely contained before work begins and all penetrations into the construction site must be sealed. Windows must be closed and air ducts shut down or taped.
- ◆ Anterooms (consisting of confined space beyond the barriers) will be provided at entrances to the work area to contain debris and provide an area where workers can remove protective clothing or vacuum off personal clothing except when exiting directly to the outside of the building.
- ◆ Walk-off mats will be at entrances to work areas during construction.
- ◆ Traffic routes will be pre-determined and traffic to and from the construction site will be minimized.

## **ENVIRONMENTAL CLEANING POLICY**

- ◆ *Any dust tracked outside the barriers must be removed immediately as it accumulates.*
- ◆ *All cleaning in the construction area will be by damp method or HEPA filtered vacuum.*
- ◆ *Debris will be removed by a pre-determined route and transported in clean, covered containers.*
- ◆ *At the end of each construction shift, construction personnel will do a thorough clean up of the area.*
- ◆ *After inspection, the contractor will remove barriers.*
- ◆ *Environmental Services will do a thorough final cleaning.*

*Thank you for participating in our effort to provide a safe hospital environment. If you have concerns or questions about infection control, please call the Infection Control Office at extension 3608.*

**VA MEDICAL CENTER  
INFECTION CONTROL PROGRAM**

**INFECTION CONTROL COMPLIANCE CHECKLIST**

**Project:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Time Start: \_\_\_\_\_ Time End: \_\_\_\_\_

The following are checked at least daily during demolition and/or construction:

1. Barrier containment completed before construction began.
2. Negative air pressure at construction site was monitored and recorded, at least daily, during construction work.
3. Construction area air exhausted directly outside or HEPA filtered to remove dust before the return to the HVAC system.
4. Air moving and HEPA filtration device placed into the construction area to remove and prevent the escape of dust and fungal particles.
5. All construction holes, pipes, conduits, punctures and/or exposures appropriately sealed.
6. Construction workers put on coveralls for entering the work site or vacuum off work clothes with a HEPA vacuum cleaner prior to exiting the work area.
7. Work surfaces water-misted to control dust while cutting.
8. Dust mats placed at entrance to work area at all times.
9. Workers wore clean shoe covers each time they exited the work area to travel to other areas of the facility (or no travel to other areas was necessary).
10. Dust tracked outside the barrier was removed immediately by damp-mop method or with HEPA filtered vacuum cleaners.
11. Debris was transported from the construction area by the pre-determined route in clean containers with tight-fitting covers.
12. Designated debris routes were cleaned by damp-mop method or with HEPA filtered vacuum cleaners prior to being returned to patient or staff use.
13. Any disruption or violation of the containment barrier integrity was immediately reported to the Project Manager.
14. The freight elevator should not transport supplies or contractors to the 7<sup>th</sup> floor. All contractors will exit on the 6<sup>th</sup> floor to minimize traffic going to the 7<sup>th</sup> floor.

**Above items checked (by initials) at the following times:**

\_\_\_\_\_

\_\_\_\_\_

**Compliance Checklist Submitted By:** \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**ATTACHMENT C**  
**Providence VA Medical Center - Infection Control Construction Permit**

Location of Construction:	Project No. & Title:
VA Project Manager:	Project Start Date :
Contractor:	Estimated Duration:
Contractor Superintendent:	Permit Expiration Date:

**Type of Construction** \_\_\_\_\_ **Pt Risk Group** \_\_\_\_\_

**Circle Class of Precautions Necessary for this Project**

Patient Risk Group	TYPE A	TYPE B	TYPE C	TYPE D
<b>LOW</b>	<b>CLASS I</b>	<b>CLASS II</b>	<b>CLASS II</b>	<b>CLASS III/IV</b>
<b>MEDIUM</b>	<b>CLASS I</b>	<b>CLASS II</b>	<b>CLASS III</b>	<b>CLASS IV</b>
<b>HIGH</b>	<b>CLASS I</b>	<b>CLASS II</b>	<b>CLASS III/IV</b>	<b>CLASS IV</b>
<b>HIGHEST</b>	<b>CLASS II</b>	<b>CLASS III/IV</b>	<b>CLASS III/IV</b>	<b>CLASS IV</b>

Infection Control \_\_\_\_\_ Date \_\_\_\_\_

<b>CLASS I</b>	<ol style="list-style-type: none"> <li>1. Execute work by methods to minimize raising dust and fumes from interior and exterior construction operations.</li> <li>2. Water mist work surfaces to control dust</li> <li>3. Immediately replace a ceiling tile displaced for visual inspection.</li> <li>4. Use travel routes that minimize exposure of patients to construction workers, materials, tools and equipment.</li> <li>5. Schedule utility interruptions during periods of low hospital activity</li> </ol>
<b>CLASS II</b>	<p>In addition to precautions listed for Class I above:</p> <ol style="list-style-type: none"> <li>1. Provide active means to prevent airborne dust from dispersing into atmosphere.</li> <li>2. HEPA vacuum upper surfaces of ceiling tiles prior to removal</li> <li>3. Seal unused doors with duct tape.</li> <li>4. Block off and seal air vents.</li> <li>5. Place adhesive walk-off mats at entrance and exit of work areas.</li> <li>6. Seal or isolate HVAC system in areas where work is being performed.</li> <li>7. HEPA vacuum work surfaces and containers before removing from the work area</li> <li>8. HEPA vacuum worker clothing, tools, materials, and equipment before leaving the work area</li> </ol>
<b>CLASS III</b>	<p>In addition to precautions listed for Classes I and II above:</p> <ol style="list-style-type: none"> <li>1. Install critical barriers at all openings to the work area</li> <li>2. Isolate HVAC system in area where work is being done to prevent contamination of duct system.</li> <li>3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.</li> <li>4. Seal holes, pipes, conduits, and punctures within the work area using fire-safe, impermeable materials.</li> <li>5. Construct anteroom contiguous with work area and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site.</li> <li>6. Contain construction waste before transport in tightly covered containers.</li> <li>7. Cover transport receptacles or carts. Tape covering to container to seal all joints.</li> <li>8. Do not remove barriers from the work area until the completed project is thoroughly cleaned by the VA's Environmental Services Department and inspected by the VA</li> </ol>
<b>CLASS IV</b>	<p>In addition to precautions listed for Classes I, II and III above:</p> <ol style="list-style-type: none"> <li>1. No work is permitted in areas occupied by patients.</li> <li>2. All personnel entering work site are required to wear head covers, shoe covers and coveralls. Head covers, shoe covers and coveralls must be changed within the anteroom each time the worker exits the work area.</li> </ol>

VA Project Manager \_\_\_\_\_ Date \_\_\_\_\_

Chief, Facilities Management \_\_\_\_\_ Date \_\_\_\_\_

**ATTACHMENT E**  
**PROVIDENCE VAMC**  
**INTERIM LIFE SAFETY MEASURES (ILSM) PLAN**

ILSM MAY BE REQUIRED IN AREAS OR SMOKE COMPARTMENTS WHERE NEW CONSTRUCTION OR RENOVATIONS ARE TAKING PLACE.

**DEFINITION:**

**INTERIM LIFE SAFETY MEASURES:** A series of operational actions taken to temporarily reduce the hazard posed by existing fire prevention or Life Safety Code deficiencies during, and until the completion of a construction or renovation program within an area or smoke compartment.

**OBJECTIVES:**

1. Determining when ILSM are necessary.
2. Insure that required ILSM in areas/smoke compartments where construction or renovations are taking place are fully adhered to.
3. Determining when ILSM can be terminated

**PROCEDURES**

1. All new construction/renovation projects must evaluated by the project coordinator /supervisor using the attached **PVAMC ILSM Requirement Assessment Worksheet**.
2. If, upon completion of the worksheet, it is determined that an ILSM Plan is not needed, the project coordinator will send a copy to the PVAMC Safety Manager for concurrence.
3. If, upon completion of the worksheet, it is determined that an ILSM Plan is needed, the project coordinator will complete the form by documenting the administrative actions necessary to mitigate the Life Safety Code deficiencies introduced, and send a copy to the PVAMC Safety Manager for concurrence.
4. Facilities Management Service staff will utilize the attached Interim Life Safety Measures Checklist for conducting inspections of contractor areas when necessary.
5. The **PVAMC ILSM Requirement Assessment Worksheet**, 11 Administrative Actions that may be applied to the project as ILSM, and ILSM assessment flowchart are provided for reference.

## PVAMC ILSM Requirement Assessment Worksheet

● **These criteria will be used to evaluate smoke compartments in which a Life Safety Code deficiency has been identified, or in which construction, renovation or alteration activities are planned. Any “Yes” answers below may require ILSM to address occupant safety.**

- Document any methods you plan on using, and what measures were taken under comments.
- Send to the Environmental Safety and Health Office-TR7, after completion.

Submitter : \_\_\_\_\_

Date Submitted:

Log# \_\_\_\_\_

Project:

Expected Duration:

Building:

Floor:

Room:

Criteria	YES	NO
The issue/work alters or significantly compromises exit access, exiting, or exit discharge building elements		
The issue/work compromises building compartmentation including fire or smoke walls, floor/ceiling assemblies, corridor walls, use area doors, or other defend in place elements		
The issue/work impairs the building Fire Protection Systems (alarm, sprinklers, suppression) for more than 4 hours in a 24-hour period.		
The activity includes Hot Work		
The activity includes large quantities of combustible materials, flammable materials, or generation of large amounts of dust and debris.		
Access to the area by emergency forces will be impaired		
Will non/limited combustible partitions be required?		

**ILSM are required\***

**ILSM are not required\***

\* A yes answer to any of the above criteria may require that an ILSM be initiated. Use the following check sheet to denote the interim life safety measures appropriate for the issue/work which compromises life safety. Daily inspections of egress access will be completed in accordance with the checked sheet and completed on the attached form during the pendency of the compromise to a life safety system.. Periodic inspections of other aspects of an ILSM shall be completed during the pendency of the ILSM. All forms will be maintained by the Safety Manager with copies in the project file.

If an ILSM is not required, provide the completed assessment only to the safety manager for review. Maintain a copy in the project file.

**Work:**

1.

**Comments:**

1.

Reviewed by: \_\_\_\_\_ Safety Manager Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Chief Facilities Management Date: \_\_\_\_\_

## Interim Life Safety Measures Check Sheet to be implemented

**Project Name** or other identifying information: \_\_\_\_\_

**Log Number:** \_\_\_\_\_

**Place a check mark in each applicable ILSM activity as determined by an assessment of the risks identified in the Assessment Work Sheet.**

**#1 INSPECTIONS / SURVEILLANCE**

- Increased surveillance of buildings, grounds, and equipment: shift / daily / other:
- Means of exiting construction areas inspected daily
- Implementation of Fire Watch
- Not applicable

**#2 ACCESSIBILITY**

- Maintenance of escape/egress routes from construction areas
- Maintenance of access to emergency services for emergency equipment, fire alarm pull stations, Fire Department connections (internal & external)
- Not applicable

**#3 EQUIPMENT – LIFE SAFETY**

- Temporary fire alarm, detection, suppression system in place
- Monthly testing and inspection of temporary systems
- Provide additional firefighting equipment in project area
- Provide additional firefighting equipment in adjacent areas
- Not applicable

**#4 COMMUNICATIONS**

- Notification to Municipal Fire Department (or applicable emergency forces group)
- Not applicable

**#5 CONSTRUCTION MATERIALS / PRACTICES**

- Partitions smoke tight and constructed of noncombustible or limited combustible materials
- Prohibition of smoking throughout building and in and near construction areas
- Implement appropriate storage practices
- Implement appropriate housekeeping practices

**#6 FIRE DRILLS**

- Implement appropriate debris removal practices
- Not applicable
- 2 fire drills per shift per quarter throughout Hospital (one additional drill beyond requirement of EC.5.30).
- 2 fire drills per shift per quarter in areas adjacent to project (one additional drill beyond requirement of EC.5.30)
- More than 2 fire drills per shift per quarter throughout Hospital. If yes, how many \_\_\_\_\_

**#7 TRAINING**

- More than 2 fire drills per shift per quarter in areas adjacent to project. If yes, how many \_\_\_\_\_
- Not applicable

- Additional training for staff in immediate area
- Additional training for staff throughout hospital
- Additional training for incident response team
- Training to promote awareness of fire-safety building deficiencies, construction hazards, ILSM
- Training on changes in physical environment (egress routes)
- Training on firefighting equipment
- Training on compensating for impaired structural or compartmentalization features of fire safety
- Not applicable

Other measures: \_\_\_\_\_

Comments: \_\_\_\_\_

Prepared by: \_\_\_\_\_

Reviewed by: \_\_\_\_\_ Safety Manager    Date: \_\_\_\_\_

Approved by: \_\_\_\_\_ Chief Facilities Management Date: \_\_\_\_\_

## ILSM Inspection Form

Project Name: \_\_\_\_\_

Log Number: \_\_\_\_\_

Date: \_\_\_\_\_ Daily \_\_\_\_\_ Weekly \_\_\_\_\_ Monthly \_\_\_\_\_

	Measure	Applicable		Compliance Status	Date/Initials
		Y	N		
1.	Exits are inspected on a daily basis and are free and unobstructed. No construction materials, equipment, or debris block free use of all exits adjacent to the construction site or are impacted by the project. <u>Temporary exit signs are in place.</u>				
2.	Provide temporary, but equivalent fire alarm and detection system.				
3.	Provides additional fire-fighting equipment (fire extinguishers). Equipment is functional and tests are up to date.				
4.	Temporary construction partitions are smoke tight, or made of noncombustible material, or made of limited combustible material that will not contribute to the development or spread of fire.				
5.	Surveillance is increased of buildings, grounds, and equipment with special attention to construction areas and storage, excavation, and field offices.				
6.	Enforces storage, housekeeping, and debris removal practices that reduce the building's flammable and combustible fire load to the lowest feasible level.				
7.	Additional training is provided to those in the hospital on the use of fire-fighting				
8.	One additional fire drill per shift, per quarter is conducted.				
9.	Temporary systems are tested and inspected monthly, and the completion dates for these tests is documented.				
10.	Education is conducted to promote the awareness of building deficiencies, construction hazards, and temporary measures implemented to maintain fire safety.				
11.	Training for those who work in the hospital is done to compensate for impaired structural or compartmental features.				

Prepared by: \_\_\_\_\_ Project Manager Date: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Date: \_\_\_\_\_

# Interim Life Safety Criteria

**BUILDING DEFICIENCY  
or  
CONSTRUCTION/RENOVATION  
PROJECT**

**YES**

**Does the project involve shutting down part or all of the suppression or detection systems for longer than 4 hours?**

**NO**

**One or more of the criteria are "YES"**

- A. Renovation that is longer than one shift:**
  - 1. More than a "One Room Project" -did not deactivate smoke detection or suppression for the project**
  - 2. Does involve hallway**
  - 3. Suppression +/-or detection systems are modified, moved, shut down, or covered (bagged). Emergency egress is blocked, or the smoke/fire petitions have been compromised**
- B. Is there a Fire Safety Deficiency in the building that:**
  - 1. Requires an interim plan**
  - 2. The deficiency has not been repaired within 6 months of the estimated date on the PFI**

**NO**

**1. Apply the pertinent 11 Administrative Actions**

**Note in project file  
ILSM does NOT apply Do not initiate ILSM**

## Attachment F Fire Systems Protection During Construction

### 1. Preventing False Fire Alarms by Smoke Detectors During Construction

Construction and building maintenance activities can potentially generate sufficient airborne dust to activate a fire alarm through nearby smoke detectors. An alarm activated by a smoke detector is immediately transmitted to the municipal fire department, which responds to the hospital with equipment and personnel. In order to prevent false fire alarms from smoke detectors during construction or other maintenance activities, it has been the practice of construction personnel to place a cover over nearby smoke detectors to prevent airborne dust from entering the detector. This practice has been effective in preventing false fire alarms; however this practice has also led to undocumented impairments to the fire alarm system when these covers are not removed when no longer needed to prevent a false alarm.

The following measures will be taken to prevent false fire alarms through smoke detectors during construction while maintaining effective control over impairments to the fire alarm system:

-When it is determined that a smoke detector may be activated by construction dust, the contractor or project manager shall direct a request to one of the hospital's electronics technicians to disable the smoke detector or any other device of the fire alarm system. The request shall include the Node, Loop, and Address of the device(s) to be disabled, the duration, and the specific types of construction or maintenance activities that are planned. The electronics technician will disable the smoke detector until notified by either the contractor or project manager that construction has ended for the day. When notified that construction has ended for the day, the electronics technician will re-enable the smoke detector. The smoke detector that is disabled will indicate a "trouble" condition at the fire alarm control panel and serve as an active indication that a smoke detector or multiple detectors have been impaired. The "trouble" indication will also serve as a continuous reminder to hospital staff that the smoke detector(s) must be restored to normal service.

--Contractors or project managers shall provide at least **48** hours notice to the electronics technicians for disabling of a smoke detector or any other fire alarm system device. Email is the preferred method of notification.

--In no case will the smoke detector(s) be disabled for more than 8 hours in a single 24 hour period. If any smoke detector or any other fire alarm system device is disabled for more than 4 hours in a 24 hour period, the project manager will prepare an ILSM risk assessment and a fire watch will be provided by the construction contractor as specified in the contract documents, or by hospital staff as designated by the project manager.

--Covers **shall not** be used on a smoke detector at any time. If found, covers shall be immediately removed from smoke detectors.

### 2. Sprinkler System Shutdowns during Construction

Construction and building maintenance may require the removal, modification, or relocation of sprinkler heads or piping. In order to prevent false fire alarms as a result of this sprinkler work, a procedure has been implemented for sprinkler system shutdowns. The following measures will be taken to prevent false fire alarms as a result of sprinkler work that maintains effective control over impairments to the installed sprinkler system:

When it is determined that the facility's sprinkler system must be shut down for system modifications, the contractor or project manager shall direct a request for shutdown to the VA. The request shall identify the specific area of the hospital impacted by the shutdown and the shutdown duration. The shutdown will be performed by VA staff. The VA staff will disable the fire alarm system points necessary to prevent false annunciation of a sprinkler system discharge. The VA staff, or the sprinkler system contractor when authorized in writing by the hospital, will close the appropriate riser valve(s) to isolate that portion of the sprinkler system that is being worked on or that needs to be isolated. The closed sprinkler valve(s) shall be identified with a sprinkler valve "SHUT" tag by the party that closed the valve(s). The closed sprinkler valve(s) will indicate a "trouble" condition at the fire alarm control panel to serve as an active indication that the sprinkler system has been impaired. The "trouble" indication will also serve as a continuous reminder to hospital staff that the sprinkler system must be restored to service.

If a section of the sprinkler system is to be drained for piping or sprinkler head replacement work, the VA staff will notify the City of Providence fire alarm division that the master box will be out of service and disable the appropriate sprinkler flow switches and/or fire main. Once the system is drained in the specific area, the VA staff can reinstall all sprinkler system flow switch devices and the master box so that they are not required to be present in the fire alarm room as a fire watch for the system. At the completion of the sprinkler system work, the contractor is responsible for notifying the VA staff that the construction activity has ended for the day and that the sprinkler system is to be refilled and restored to normal operation. The VA staff must take out all flow switches, fire alarm annunciating devices, and possibly main fire pump prior to recharging of the system. Once the appropriate devices are disabled the VA staff, or the contractor when authorized in writing by the hospital, can then start filling the system and bleeding air out the Inspector Test Valve (ITV) until the sprinkler system is completely refilled in the specific area of the facility. The contractor **must** stay in the impacted area for a minimum of **15** minutes after the system is refilled to ensure there are no leaks in or abnormalities to the fire and sprinkler systems.

--Contractors shall provide at least **48** hours notice to the VA for sprinkler system shutdown. Email is the preferred method of notification.

--In no case will the sprinkler system be disabled on two consecutive floors or in multiple areas at the same time in the main hospital building.

--In no case will the sprinkler system be disabled while smoke detectors or other fire alarm initiating devices are disabled in the same area.

--In no case will sprinkler systems be shut down except for portions of the sprinkler system under renovation, modification or construction, or for new connections to the sprinkler system. Sprinkler systems will not be shut down to avoid accidental discharge of the sprinkler system caused by unintentional damage to the sprinkler system from construction activity. Provide metal head guards at each sprinkler head within the limits of work.

--In no case will the sprinkler system be disabled for more than 8 hours in a single 24 hour period. If the sprinkler system must be disabled for more than 4 hours in a 24 hour period, the project manager will prepare an ILSM risk assessment and a fire watch shall be provided by the construction contractor as specified in the contract documents.

## **ATTACHMENT G**

**VA MEDICAL CENTER  
PROVIDENCE, RHODE ISLAND**

**POLICY MEMORANDUM 07B-3  
January 03, 2012  
(07B)**

### **REGISTRATION OF PRIVATELY OWNED VEHICLES**

#### **1. PURPOSE**

To provide for the registration of all staff members and contractor vehicles which are parked or operated on the Medical Center grounds. This program will allow VA Police Officers to identify the ownership of vehicles, monitor and control vehicle parking, enforce applicable traffic regulations and facilitate contact with the owners of vehicles when it is necessary and in the interest of safety, security and legitimate enforcement efforts.

#### **2. POLICY**

a. All staff members must register their vehicles with the VA Police Service within 48 hours after their reporting for duty at the Medical Center. Compliance with this policy is a condition of employment.

b. The registration process will include issuance of a numbered VA parking permit. This permit must be displayed on the inside, driver side, lower corner of the windshield or inside, center, of the windshield by the rear-view mirror. Permits may be displayed in any visible location on motorcycles.

#### **3. DEFINITIONS**

Staff - for the purpose of this policy, staff shall include all VA employees, non-compensated employees and volunteers.

Contractors Supervisors - for the purpose of this policy, Contractors Supervisors include those individuals who represent a company, who is under contractual obligation to the government, for services related to the maintenance and construction of the Medical Center's infrastructure. Supervisors are designated by project managers. Supervisors are allowed to park on site, for the purpose of managing their assigned tasks. Those contractors, not designated as supervisors will not park on property. Supervisors will ensure that their employees meet the requirements of this policy.

Contractors - for the purpose of this policy, contractors include those individuals employed by a company which is obligated by contract to the government for services related to the maintenance and construction of the Medical Center's infrastructure. Contractors are required to register their vehicles on property and maintain a valid parking permit with their vehicles. That permit will be displayed at all times. Contractors will not park on VA Property. However they can park in a designated area off property.

#### **4. MEMBERSHIP**

None.

## **5. PROCEDURES**

a. All staff members and contractor supervisors will complete the vehicle registration form at the time of initial employment or service and will report to the VA Police Service for issuance of a permit. Proof of a valid state vehicle registration and current motor vehicle insurance policy must be provided at the time of registration. Color coded and numbered permits will be issued as follows:

- (1) Staff Physicians, the Director and Associate Directors - RED.
- (2) Employees - GREEN or Employees in Car Pool Program - BROWN.
- (3) Volunteers - YELLOW.
- (4) Temporary - BLACK.
- (5) Contractor Supervisor - ORANGE (hanging style)
- (6) Special Permit- As directed by Police Services.

b. All staff members who have previously registered their vehicles must re-register their vehicle each time any of the following occurs:

- (1) Change of state registration plate number.
- (2) Change of vehicle.
- (3) Loss of permit (i.e., windshield replacement).

c. Vehicle permits are considered a controlled item and as such, must be returned to the VA Police upon completion of a staff member's employment or service at the Medical Center.

d. Handicapped parking spaces, located in all parking lots on Medical Center grounds, may be utilized by any staff member who has been issued a state or VA handicap placard. The placard must be displayed at all times while said vehicles are parked in a handicapped designated space.

(1) Requests for VA handicap placards will be submitted to the Chief, VA Police. The requesting employee will be referred to the Employee Health Clinician for determination of the extent of disability. The Employee Health Clinician will then forward this determination to the Chief, VA Police for determination of issuance or non-issuance of the placard. All VA handicap placards will be issued for a limited period of time. Long term disabilities will require issuance of a state handicap placard. VA handicap placards are considered a controlled item and as such, must be returned to the VA Police.

e. Vendors and contract staff of administrative services are required to obtain a temporary parking placard issued by either the Facilities Management Service or the Police Service.

## **6. RESPONSIBILITY**

a. The Human Resources Management Service is responsible for instructing new employees as to this policy and the requirement to respond to the VA Police office to process a vehicle registration form.

b. Service Chiefs/Line Managers are responsible for instructing new volunteers as to this policy and the requirement to respond to the VA Police office to process a vehicle registration form.

c. The VA Police Service is responsible for issuance of all parking permits and placards and maintaining accurate records of all motor vehicles registered at the Medical Center.

d. The Employee Health Clinician is responsible for assisting the Chief, VA Police in determining a staff member's eligibility for issuance of a VA handicap placard for acute or episodic illnesses requiring short-term parking needs.

e. All staff members are responsible for compliance with this policy and notifying the VA Police Service of all incidences of lost, stolen or damaged permits.

## **7. REFERENCES**

VA Handbook 0730

## **8. RESCISSIONS**

Policy Memorandum 07B-03, Registration of Privately Owned Vehicles, dated August 1, 2009.

**VINCENT NG**  
**Medical Center Director**

**Attachments: None**

**DISTRIBUTION: D**

## ATTACHMENT H

VA MEDICAL CENTER  
PROVIDENCE, RHODE ISLAND

FACILITIES MANAGEMENT SERVICE  
SOP POLICY MEMO 138-16  
May 15, 2012

### CRANES

#### 1. PURPOSE

The purpose of this memorandum is to establish procedures for the use of cranes at this facility. The procedures will be used to ensure that the lifting of loads above the ground surface is performed in a safe manner and fully informs facility staff of the details of the lift to be performed using a crane. This policy also defines responsibilities for these procedures.

#### 2. POLICY

- a. It is the policy of Facilities Management Service that all work with cranes shall be performed in a manner in strict compliance with construction industry regulations of the Occupational Health and Safety Administration and with the safety guidelines and policies of the Department of Veterans Affairs.
- b. It is the policy of Facilities Management Service that employees and contractors be informed about specific details of crane operations when such crane use is proposed at this facility and that such information be provided to the facility staff by the crane user prior to use of a crane at this facility.
- c. It is the policy of the Providence VA Facilities Management Service that the requirements stated herein will be enforced.

#### 3. DEFINITIONS

- a. *Crane Operator.* A person who has demonstrated that they are proficient in the operation of the various types of cranes. Certification shall be provided by the employer or an accredited testing agency, such as the National Commission for the Certification of Crane Operators (NCCCO).
- b. *Competent Operator.* A crane operator who:
  1. Is capable of identifying existing and predictable hazards with regard to the particular crane being operated.
  2. Is capable of identifying existing and predictable hazards with regard to the hoisting operations being undertaken.
  3. Has the training and experience to properly set up and safely control all crane functions.
- c. *Competent Person.* Per OSHA, one who is capable of identifying existing and predictable hazards in the surroundings; is capable of identifying working conditions that are unsanitary, hazardous or dangerous to employees; and has authority to take prompt corrective measures to eliminate them.

- d. *Controlling Entity*. Contractor or other entity that is in actual control of a project. Could be the General Contractor, Construction Manager, Prime Contractor or the Owner, depending upon the level of control applied with regard to the selection, operation and maintenance of cranes.
- e. *Controlling Supervisor*. The individual who is directly responsible for crane operation and maintenance at a particular project.
- f. *Crane Load Rigger*. A person trained and competent.
- g. *Critical Lift*. A Lift that shall be one that requires a crane to “walk” with a load; or require more than one crane; or one that will be made over an occupied building or facility; or one that exceeds 75% of the crane capacity (taken from block 6 of the Permit Form).
- h. *Critical Lift Plan*. A document that is used to plan crane lifts that have the potential for increased risk. A critical lift plan should detail the weight(s) and dimensions of the load to be hoisted; the path of travel of the load, including various height and clearance dimensions; the maximum radius or radii at which the load will be hoisted; and the exact configuration of the crane(s) to be used. Load charts for the make, model, serial number and configuration of the crane(s) shall be attached.
- i. *Maximum Intended Load*. The heaviest load that a crane’s capacity chart shows it is capable of lifting in a given configuration and radius.
- j. *Qualified Person*. By possession of a recognized degree, certificate or professional standing or by extensive knowledge, training and experience, one who has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work or the project.
- k. *Signal Person*. A person trained and competent in the application of the type of signals used during a lift, with a basic understanding of crane operation and limitations, including crane dynamics involved in swinging and stopping loads and boom deflection under load.
- l. *Types of Cranes*. Generally mobile cranes, such as crawler cranes, rough terrain cranes, truck cranes, boom trucks and the various other types of mobile cranes generally used on construction sites.

#### **4. PROCEDURES**

- a. OSHA requires a Competent Person to inspect all operational components of the crane on a daily basis. The Competent Person must have received training in the provisions of the OSHA Standard, be capable of understanding the hazards associated with the crane being used and have the authority from the employer to correct and abate any hazard associated with the crane.
- b. The Crane Operator *shall* be certified in the operation of the crane. A certification is determined through a *written test* that the Crane Operator knows the information necessary for safe operation of the specific type of equipment the individual will operate; and the Crane Operator is able to read and locate relevant information in the equipment manual and other materials pertaining to the crane.
- c. A Signal Person shall be used for any crane operation. Each Signal Person should know and understand the type of signals used; be competent in the application of the type of signals used; and have a basic understanding of crane operation and limitations, including the crane

dynamics involved in swinging and stopping loads, and boom deflection from hoisting loads.

- d. After assembly on-site, the crane shall have a thorough inspection similar to an annual inspection. A Competent Person shall perform this inspection.
- e. The Crane Operator shall perform a daily visual inspection at the beginning of each shift. All functional operating mechanisms, air and hydraulic systems, chains, ropes, slings, hooks and other lifting equipment shall be inspected. The rated load of each crane shall be plainly marked on both sides of the crane and visible from the ground. Each hoist and sling shall also be marked with the load limit. Unsafe conditions found during the inspection shall be reported to the Controlling Supervisor and shall be corrected before operation is resumed.
- f. A Crane Permit shall be obtained from Facilities Management Service Engineering Section by any party proposing to use a crane at this facility. The permit shall be submitted to the designated Project Manager of the Facilities Management Service Engineering Section and shall not be valid until signed by the FMS Project Manager. The Permit Form to be used is at Attachment "A" to this memorandum.
- g. If any crane operation is determined to be a Critical Lift, the party submitting the Crane Permit shall include with the permit form a Critical Lift Plan that is signed by a registered Professional Engineer.

## **5. RESPONSIBILITY**

- a. The Chief, Facilities Management Service is responsible for the administration of the Crane program.
- b. The FMS Project Manger is responsible for ensuring that contractor personnel are thoroughly familiar with and comply with this memorandum including the required use of the attached Crane Permit Application for all lifts.
- c. The Contractor is responsible for the following:
  - 1. Preparation and submittal to the FMS Project Manager a completed Crane Permit Application with all required information.
  - 2. Provide adequate supervision of all hoisting operations.
  - 3. Ensure that the Crane Operator performs a daily inspection of the crane, including an operational check of all control mechanisms.
  - 4. Determine if the crane operation will be a "Critical Lift" as defined by the evaluation on the attached Crane Permit Application form.
  - 5. Determine, through verifiable methods, the weight(s) of items to be hoisted.
  - 6. Ensure that all parties involved know the weight(s) of the loads to be lifted
  - 7. Ensure that appropriate rigging equipment is available to handle the specified loads
  - 8. Ensure that a qualified Crane Load Rigger is assigned to inspect all rigging equipment and to oversee the rigging of all loads.
  - 9. Ensure that all parties understand the hoisting operations as planned, including the path of travel of all hoisted loads.
  - 10. Determine if outside factors, such as weather, will interfere with the hoisting operations.
  - 11. Ensure that tag lines or other methods are used to maintain complete control of the load at all times.

12. Ensure that persons who are not involved in hoisting operations are not in the path of travel or otherwise endangered by hoisted loads.
  13. Ensure that the Signal Person(s) is properly qualified and that the chosen signaling system is appropriate and adequate for the job.
- d. The Crane Operator has the overall responsibility for the lift. Supervisors should never be able to override a Crane Operator's decision to stop a lift. If an Operator does stop a lift, a full review of all parameters shall be undertaken before operations are resumed.

JOHN J. BELIVEAU  
Chief, Facilities Management Service

#### ATTACHMENTS

A – Crane Permit



**VAMC Providence**  
 May 15, 2012  
**Planned Critical Lift Plan & Crane Permit**

Permits must be posted at the lift site until work is complete or a new permit is issued. This permit must be reviewed every shift and reissued if a change in conditions (equipment, weather, and/or ground) or scope of work has occurred. Expired permits shall be returned to the VA for filing. This permit and supporting data must be submitted before any of the following lifts are made (check all that apply):

- A multiple crane lift
- Personnel Hoisting
- A non-routine lift of 20 tons or more
- An expected load lift is 75% or more of the crane's rated load capacity
- A lift over electrical lines, HVAC piping or operating facilities which may endanger patients and personnel

<b>Description of Proposed Crane Work: (Include # of items to be picked and expected # of days and location)</b>		
Proposed date for lift start:		Expected completion date:
<b>1. Crane Information</b>		
Make:	Model:	Capacity (tons):
Total Boom Length:	Will Jib Be Used: (yes or no)	Jib Length:
Maximum Boom Length Required:		Maximum pick Radius Required:
<input type="checkbox"/> Verify manufacturer's load chart indicates lifting capacity at stipulated load radius and boom lengths. Note: If boom length and/or radius is between the stipulated or posted value on the load chart select the next lesser rating capacity. The next lesser rating capacity may be the next longer or shorter boom length.		
<b>2. Outriggers, Pads, and Tires:</b>		
<input type="checkbox"/> Outriggers Fully Extended and Set      Check One: _____ Track    _____ Tires <input type="checkbox"/> Soil Type is Determined to be Acceptable for Imposed Load <input type="checkbox"/> VA Engineering has reviewed and determined underground utilities and structures are not at risk for damage.		
<b>3. Load information</b>		
Note: Cranes equipped with computers indicating boom length, angle, and radius are safety devices only and should not be used in place of the operator's responsibility to actually determine the measurements required to calculate a safe lift.  Note: Accessories, Crane Capacity, Parts of Line and Rope Capacity, and the working quadrant of the crane should be considered when calculating Net Crane Capacities.		
Description of Maximum load (include Dimensions):		
Weight of Max Load:	How was load determined:	
<b>4. Rigging Information</b>		
List all rigging components (Including number, type, size, capacity, etc.) <b>Note – Anti-Two Block device is required:</b>		

Weight of Line, Block & All Rigging:	
<hr/>	
<b>5. Total Gross Load</b>	<b>5. "Worst Case" Lift Scenario</b>
a) Weight of Max Load:	a) Maximum Pick Radius:
b) Weight of Line, Block & All Rigging:	b) Total Gross Load:
c) Safety Factor Added Weight:	c) Crane Chart Capacity at Max Pick Radius:
d) Total Gross Load:	d) % of Crane Capacity (b/c):
<hr/>	
<b>6. Critical Pick Evaluation</b>	
a) Will crane need to "walk" with loads?	_____ Yes      _____ No
b) Will pick require more than one crane?	_____ Yes      _____ No
c) Will pick be made over occupied building or facility?	_____ Yes      _____ No
d) Does "worst case" lift scenario exceed 75% of crane capacity (5d)?	_____ Yes      _____ No
If the answer to any of the above is "yes" then this is a critical lift that will require additional information and the signature of a licensed professional engineer.	
<hr/>	
<b>7. Crane Location Information</b>	
a) Will crane pick affect pedestrian or vehicular traffic? If "yes", a traffic control plan must be submitted.	_____ Yes      _____ No
b) Are there overhead power lines or other hazards in the lift area?	_____ Yes      _____ No
c) Will load or any part of the crane be over or within 15 feet of electrical lines, pipes, process systems or operating equipment?	_____ Yes      _____ No
d) Will crane height exceed 120 feet? If "yes" the crane must have a light beacon at the top.	_____ Yes      _____ No
e) Will crane height exceed 200 feet? If "yes" the FAA must be notified at least 30 days prior.	_____ Yes      _____ No
<hr/>	
<b>8. Additional Information (All must be provided)</b>	
a) Plot plan showing crane location, adjacent structures, roadways, utilities, etc. within the swing radius.	
b) Scale elevation sketch or drawing showing crane location, adjacent structures and load.	
c) Applicable crane load charts.	
d) Valid crane operators' license.	
e) Valid third party annual inspection certificate.	
<hr/>	
<b>9. Wind Speed</b>	
a) Lifts are not allowed with wind speed in excess of: _____ MPH	
b) Wind Speed at time of lift: _____ MPH	
<hr/>	
<b>10. Comments, Notes, and Sketches:</b>	

## 12. APPROVALS

The Contractor, Rigger, and Crane Operator are the Competent Persons solely responsible for the safe execution of the lift(s). Execution of the lift will be in complete accordance with OSHA regulations.

### COMPLETE CHECKLIST BELOW TO ENSURE A SAFE LIFT IS PLANNED

- The load weight is confirmed known
- The load hook is directly over the load center of gravity
- Boom angle, boom length, lift radius, and the crane capacity are known
- Outrigger pads are fully extended and blocking is sufficient for the load
- Tires are clear of the ground and the crane is level
- Ground, soil, and/or pavement is confirmed to have capacity for the imposed load
- Rigging equipment has been inspected and in safe working condition
- All obstacles and obstructions have been identified
- Lifts in close proximity to power transmission lines shall meet OSHA 29 CFR 1926.550, MIOSHA R 408.11936, and applicable ANSI B30.5 safety standards
- A final check will determine the wind speed is within approved limits for this lift
- A signal method is has been determined between the crane operator and the signalman
- An individual has been designated to observe for obstructions and unauthorized personnel
- The crane operator meets OSHA qualifications requirements to operate the crane
  
- Verify a "competent person" is to inspect prior to use and during use, all slings, fastenings, and attachments for damage or defects. Damaged or defective equipment shall be immediately removed from service.
  
- Verify a "competent person" is to inspect all crane equipment and machinery prior to use and during use to ensure it is in safe operating condition. Any deficiencies shall be repaired prior to continued use.
  
- Verify the crane is in compliance with Federal and State regulations requiring frequent, periodic, and annual inspections. A thorough annual inspection has been made by a competent person, government, or private party recognized by the U.S. Department of Labor.

Date of Last Annual Inspection: \_\_\_\_\_ Inspected by: \_\_\_\_\_

Competent Person:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor Representative:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Crane Operator:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Crane Load Rigger:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

-----  
The individuals listed below have reviewed this Permit for completion of the listed requirements only, without regard for accuracy. All responsibility for crane operations rests with the individuals signing the form above this Statement.

VA Project Manager:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

VA Safety Representative:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

VA Police (if required):

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

